EXHIBIT 3

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CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK

E. JEAN CARROLL, Plaintiff,	
v.	No. 22 Civ. 10016 (LAK)
DONALD J. TRUMP,	
Defendant.	

EXPERT REPORT OF PROFESSOR ASHLEE HUMPHREYS, PHD

January 9, 2023

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I. INTRODUCTION

A. Qualifications

I am a Professor of Integrated Marketing Communications at Medill School of Journalism and Professor of Marketing at the Kellogg School of Management, Northwestern University. I hold a Doctorate in Marketing from the Kellogg School of Management with a concentration in Cultural Sociology and a Bachelor of Arts degree in Economics and Philosophy from Northwestern University.

I have been on the faculty at Northwestern University for 14 years, regularly teaching classes on Social Media, Consumer Research, and Marketing Research. I instruct students on both the strategic and analytical tasks of Marketing, which include assessing the impact of social media campaigns and strategically directing a portfolio of social media tools to pursue managerial goals involving persuasion, advertising, market growth, and branding.

My current research focuses on social media and online communities. I am the author of *Social Media: Enduring Principles* (Oxford University Press, 2016), a review and synthesis of the empirical social science research on social media. My research on social media includes a project looking at the development of norms and institutions on social media platforms like Wikipedia and YouTube. I also have conducted recent research in the area of online search and search engine optimization, including a project in which I use text analysis to identify consumer goals that, when matched, can optimize advertising spending and increase click-through rates. In this work, I have developed and refined the method of automated text analysis, which I use to analyze textual data—a method I helped introduce to Marketing.

My broader research agenda concerns the role of institutions in markets. My dissertation

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research examined how markets are created through shifts in social structure using the case of casino gambling in America. This research ("Megamarketing: The Creation of Markets as a Social Process, *Journal of Marketing*, 2010) was selected as a lead article in the *Journal of Marketing*.

I have received several accolades for my research. I was runner up for the Maynard Award for best paper in Marketing. I have also won the Sidney J. Levy award in 2010 for the contribution of my dissertation research to Consumer Culture Theory. In addition, I was named an MSI Young Scholar in 2012 and have been selected as an MSI Scholar in 2020, one of a select group of 35 Marketing Scholars who are counted "amongst the most prominent marketing scholars in the world," according to Barbara Kahn, MSI's Executive Director.

My full CV and list of matters in which I have testified is attached as Appendix A.

B. Assignment

I was engaged by Kaplan Hecker & Fink LLP on behalf of E. Jean Carroll to create an analytic model to (1) estimate the number of impressions for the allegedly defamatory statement ("Statement") that was posted on Truth Social by Donald Trump on October 12, 2022¹ and circulated on social and traditional media ("Impressions Model"), (2) analyze the impact, if any, of this Statement by estimating the percentage of people who may have been receptive to this Statement and assess the damage to Ms. Carroll's reputation and person brand ("Impact Model"), and (3) provide a model to estimate costs for reputational repair based on the impact of those impressions ("Damages Model") on behalf of Ms. Carroll in connection with the above-

https://truthsocial.com/@realDonaldTrump/posts/109158644496040450.

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captioned case.^{2, 3}

I also submitted a report in the case *Carroll v. Trump*, No. 20 Civ. 7311 (S.D.N.Y.) (LAK) (JLC). In the present report I estimate the impressions, impact, and damages for only the October 12, 2022 Statement using the same methodology adopted in my prior analysis.

The analysis detailed in this report provides an estimate of the impressions across social and traditional media channels and their reputational impact in order to assess reputational harm based on the information provided to me by Counsel and my independent research. Specifically, it takes into account the multi-channel dissemination of the Statement across social media like Twitter and Truth Social, traditional media like the *Washington Post* and Fox News, and websites like the *Vice.com* and the *Radar Online*.

My analysis is presented as of January 9, 2023. I reserve the right to amend or supplement my opinions if new information becomes available to me.

C. Summary of Opinions

After reviewing the data provided in this case, performing independent research and analysis, and based on my own professional background, prior research, education, and more than a decade of experience in the field of digital communication and marketing, I conclude the following with a reasonable degree of certainty:

I was assisted in the preparation of this report by a team of research assistants at Voluble Insights, whom I supervised. Throughout my report, I use the word "I" to refer to work conducted by myself or work Voluble implemented under my direction.

For the purposes of writing this report, I am being compensated at a rate of \$600 per hour, subject to a 15 percent discount. I will be compensated at a rate of \$1,000 per hour for deposition testimony, and at a rate of \$1,000 per hour for trial testimony, subject to the same 15 percent discount. My compensation is in no way contingent on the nature of my findings, the presentation of my findings in this report or subsequent testimony, or the outcome of this or any other proceeding. I have no other interest in this proceeding.

- A. Person brands are well-known people who also possess a set of brand meanings and associations that have value. Person brands are formed through exposure in a media system. They have social and cultural capital and can become devalued when an unpredictable event occurs, or if a negative claim is made about the person. A person brand that has a general popular following can be especially harmed by negative claims, even if only a subset of the public believes the claims. Their reputation relies on a "generalized perception" among the public, and public opinions and individual beliefs can shift when people take cues from their surroundings, including what they learn in the media. The damage to a person brand can be severe and lasting, no matter if the person at issue is at fault or whether their primary followers believe the claims.
- B. Mr. Trump made the at-issue Statement on October 12, 2022, in regard to Ms. Carroll's allegation that Mr. Trump had sexually assaulted her in the mid-1990s in the dressing room of a Bergdorf Goodman department store in New York City. The Statement made by Mr. Trump, an extraordinarily high-profile person, generated significant online conversation and media coverage.
- C. A measure of the dissemination of the Statement is possible using an information cascade model to estimate impressions on social media and with ratings, circulation, and web traffic data to estimate impressions on traditional media. I have identified between 13,787,119 and 18,020,819 impressions generated by Mr. Trump's Statement ("Impressions Model"). This number of impressions reflects the prominence of Mr. Trump, but nonetheless is a conservative estimate for the reasons I detail in the description of the Impressions Model.
- D. The impressions Mr. Trump's Statement generated across online and traditional media impacted Ms. Carroll's person brand. It is possible to quantify some, but not all, of the negative impact. Mr. Trump's Statement built on the effects of initial statements in June 2019 and further impacted Ms. Carroll's person brand by keeping allegedly defamatory statements in the public sphere. In particular, his statement reinforced existing damage to Ms. Carroll's person brand and prompted further harm. Social and online media users published negative and vicious comments about Ms. Carroll in response to Mr. Trump's statements, indicating that her person brand has been, and continues to be harmed. Since Mr. Trump's Statement followed other similar statements made in June 2019, Mr. Trump's Statement again linked negative associations with her person brand and strengthened existing negative associations with her person brand among the audience who is receptive to Mr. Trump's statement.
- E. In an attempt to quantify at least a portion of the impact this Statement had on Ms. Carroll's brand, I applied academic research and industry estimates related to audience composition to estimate that, of the impressions collected, an average of 21.42% of the impressions were receptive to Mr. Trump's message, resulting in an estimated range of 3,764,125 to 5,649,724 receptive impressions that should be corrected (*i.e.*, impressions that may have been received by those who likely found the Statement credible; "Impact Model").

- F. The utterance and circulation of Mr. Trump's Statement caused short- and long-term harm to Ms. Carroll's person brand, shifting perceptions associated with her person brand among the general public and specific perceptions among a group of people receptive to the claims. Ms. Carroll's reputational value has been diminished due to the Statement. This kind of reputational harm has a long-lasting effect on her ability to capitalize on her person brand in the future because Ms. Carroll has lost control of her brand, which she worked for decades to develop.
- G. A holistic, integrated campaign is needed to effectively create attitudinal change and in turn repair reputational damage. In such a campaign, the corrective message would need to come from a trusted source and, absent any other prior campaigns, would need to ensure that the audience is exposed to the message multiple times. For example, one such solution to reputation repair is to enlist the help of multiple online intermediaries and sources that consumers trust. The campaign would need to take into account where the target audience gets their news. Using my estimates for the quantifiable impact of Mr. Trump's Statement (*i.e.*, the 3,764,125 to 5,649,724 receptive impressions that should be corrected) and research related to exposures required and media considerations costs, I estimate that the cost to counteract the impact of the defamatory claims is between \$368,183.78 and \$2,763,107.82 ("Damages Model"). Given the above-stated needs of the campaign and contingent on a prior campaign being run, I believe the appropriate corrective campaign would be the low range of the Damages Model, from \$368,183.78 to \$552,621.56.
- H. My estimates of the impressions generated by the Statement, the quantification of the receptive impressions, and the costs of the corrective campaign are all conservative. Among other things, I consider only a subset of the impressions generated by Mr. Trump's Statement. Therefore, I undercount the receptive impressions and the costs needed to correct the receptive impressions.

The materials I considered are noted in this report, provided as appendices or native files, and/or listed in Appendix B. A glossary of technical terms used throughout my report can be found in Appendix C.

II. CASE BACKGROUND

A. The Parties

i. E. Jean Carroll

Elizabeth Jean (E. Jean) Carroll is a journalist, author, former writer for Saturday Night

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Live, and former advice columnist for *Elle* Magazine.⁴ Ms. Carroll wrote for *Saturday Night Live* in the 1980s and hosted her own show called *Ask E. Jean* on MSNBC's predecessor, America's Talking, from 1994 to 1996.⁵ Her work was featured in numerous major publications including *Rolling Stone*, *GQ*, and *Playboy*. Ms. Carroll's column for *Elle* Magazine, "Ask E. Jean," was at the time it was published, the longest running advice column in the United States.⁶

Ms. Carroll is also the author of numerous books including Female Difficulties: Sorority Sisters, Rodeo Queens, Frigid Women, Smut Stars, and Other Modern Girls, Hunter: The Strange and Savage Life of Hunter S. Thompson, A Dog in Heat Is a Hot Dog and Other Rules to Live By, Mr. Right, Right Now, and What Do We Need Men For?: A Modest Proposal.⁷

ii. Donald J. Trump

Donald John Trump is an American businessman, media personality, and politician who served as the 45th president of the United States from 2017 to 2021.⁸ He was a real estate developer who owned and/or had his name on numerous hotels, casinos, golf courses, and other buildings in New York and around the world.⁹ In 2004, Mr. Trump starred in "The Apprentice" (later known as "The Celebrity Apprentice"), a reality television competition series where he judged aspiring business people based on his business experience.¹⁰ He hosted for 14 seasons until 2015.¹¹

https://www.elle.com/author/4913/e-jean/.

https://www.usatoday.com/story/money/2019/07/03/e-jean-carroll-new-york-circuit-donald-trump-assault-accusation/1584135001/.

⁶ https://www.amazon.com/E-Jean-Carroll/e/B000AP7CJM.

https://www.goodreads.com/author/show/30738.E Jean Carroll.

⁸ https://www.britannica.com/biography/Donald-Trump.

⁹ https://www.britannica.com/biography/Donald-Trump.

https://www.nytimes.com/2020/09/28/arts/television/trump-taxes-apprentice.html.

https://www.cbsnews.com/news/donald-trump-officially-fired-from-the-celebrity-apprentice.

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In July 2016, Mr. Trump was nominated as the Republican presidential candidate and ultimately won the 2016 U.S. presidential election. ¹² Throughout his time as president, Mr. Trump enjoyed significant support from Republican voters, with an average of 87% of Republicans saying they approved his handling of the job from 2017 through 2020. ¹³ After serving one term as president, Mr. Trump lost his bid for re-election and officially left the White House in January 2021. ¹⁴

Since leaving office, there have been a number of investigations into Mr. Trump, his business dealings, and his handling of classified information. Despite these investigations, polls show that support for Mr. Trump has remained consistent. Polls tracked by FiveThirtyEight show that Mr. Trump has maintained a favorability rating of around 40% from February 2021 through December 7, 2022. Favorability among Republican voters is even higher. A September 2022 New York Times-Siena College poll found that 90% of Republican respondents had either a very favorable or a somewhat favorable impression of Mr. Trump. Trump. Further, the same poll found that 91% of Republican respondents indicated they would vote for Mr. Trump, assuming he were the Republican nominee and President Biden were the Democratic nominee in the 2024 election. In an August 2022 Ipsos poll, 59% of Republicans indicated that Mr. Trump should be the Republican party nominee for the 2024 election. According to a YouGov poll conducted

https://www.cnn.com/2016/07/19/politics/donald-trump-republican-nomination-2016-election.

https://www.pewresearch.org/fact-tank/2020/08/24/trumps-approval-ratings-so-far-are-unusually-stable-and-deeply-partisan/.

https://time.com/5907973/donald-trump-loses-2020-election/; https://www.nytimes.com/2021/01/20/us/politics/biden-president.html.

https://time.com/6212677/donald-trump-investigations-explained/.

https://projects.fivethirtyeight.com/polls/favorability/donald-trump/.

https://www.nytimes.com/interactive/2022/09/16/upshot/september-2022-times-siena-poll-crosstabs.html.

https://www.nytimes.com/interactive/2022/09/16/upshot/september-2022-times-siena-poll-crosstabs.html.

https://www.ipsos.com/en-us/news-polls/Republican-voters-continue-to-view-Trump-as-the-partys-leader.

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October 16-18, 2022, Mr. Trump's overall favorability rating was 42% (N=1,500, $\pm 3.2\%$) (YouGov Economist 2022).²⁰

B. Allegedly Defamatory Statement

Mr. Trump posted the Statement and a video²¹ to his Truth Social account on October 12, 2022, in which he made allegedly defamatory claims about Ms. Carroll.²² Previously, Mr. Trump had made statements containing allegedly defamatory claims in response to the allegation by Ms. Carroll in an excerpt from her 2019 book that Mr. Trump sexually assaulted her in the mid-1990s in the dressing room of a Bergdorf Goodman department store in New York City.²³

The Truth Social Statement was released by Mr. Trump on October 12, 2022:

This "Ms. Bergdorf Goodman" case is a complete con job, and our legal system in this Country, but especially in New York State (just look at Peekaboo James), is a broken disgrace. You have to fight for years, and spend a fortune, in order to get your reputation back from liars, cheaters, and hacks. This decision is from the Judge who was just overturned on my same case. I don't know this woman, have no idea who she is, other than it seems she got a picture of me many years ago, with her husband, shaking my hand on a reception line at a celebrity charity event. She completely made up a story that I met her at the doors of this crowded New York City Department Store and, within minutes, "swooned" her. It is a Hoax and a lie, just like all the other Hoaxes that have been played on me for the past seven years. And, while I am not supposed to say it, I will. This woman is not my type! She has no idea what day, what week, what month, what year, or what decade this so-called "event" supposedly took place. The reason she doesn't know is because it never happened, and she doesn't want to get caught up with details or facts that can be proven wrong. If you watch Anderson Cooper's interview with her, where she was promoting a really crummy book, you will see that it is a complete Scam. She changed her story from beginning to end, after the commercial break, to suit the purposes of CNN and Anderson Cooper. Our Justice System is broken along with almost everything else in our Country. Her lawyer is a political operative and

A breakdown of favorability by party was not available in the reported results, and the raw data was not provided. https://docs.cdn.yougov.com/ez0xfzdbfl/econtoplines.pdf.

https://truthsocial.com/@realDonaldTrump/posts/109158586745522514.

Throughout this report, when I use the phrase "defamatory statements," I mean "allegedly defamatory statements" and am basing my opinion on the assumption that these statements are defamatory.

Complaint dated November 4, 2019, in *Carroll v. Trump*, No. 20 Civ. 7311 (S.D.N.Y.) (LAK) (JLC) ("Carroll I Complaint").

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Cuomo crony who goes around telling people that the way to beat Trump is to sue him all over the place. She is suing me on numerous frivolous cases, just like this one, and the court system does nothing to stop it. In the meantime, and for the record, E. Jean Carroll is not telling the truth, is a woman who I had nothing to do with, didn't know, and would have no interest in knowing her if I ever had the chance. Now all I have to do is go through years more of legal nonsense in order to clear my name of her and her lawyer's phony attacks on me. This can only happen to "Trump"! ²⁴

In addition to this Statement, on October 12, 2022, Mr. Trump posted a video featuring clips from Ms. Carroll's 2019 *Anderson Cooper 360* interview overlaid with text commentary,²⁵ and then posted two similar videos on Truth Social on October 20, 2022.²⁶ While the focus of this report is the claims made in the text-based Statement, the spread of these three videos likely furthered Mr. Trump's efforts to cast Ms. Carroll in a negative light. I nevertheless do not attempt to identify or attribute any additional harm caused by the videos themselves.

I understand that this Statement contained several allegedly defamatory claims about Ms. Carroll, including: (1) that Mr. Trump did not rape Ms. Carroll; (2) that he had no idea who Ms. Carroll was; and (3) that Mr. Trump implied and affirmatively intended to imply that Carroll had invented the rape accusation as a "Hoax," "Scam," or ploy to increase her book sales.²⁷

As discussed below, this Statement received widespread circulation across print, web, social, and traditional media outlets, directly impacted Ms. Carroll's brand, and furthered negative associations already in the public sphere.

https://truthsocial.com/@realDonaldTrump/posts/109158644496040450.

https://truthsocial.com/@realDonaldTrump/posts/109158586745522514.

https://truthsocial.com/@realDonaldTrump/posts/109200571344419422;https://truthsocial.com/@realDonaldTrump/posts/109200531178060636.

Complaint dated November 17, 2022, in *Carroll v. Trump*, No. 22 Civ. 10016 (S.D.N.Y.) (LAK) ¶¶ 96-98 (the "Complaint").

III. THEORETICAL BACKGROUND

A. Reputation and Reputational Damage

Reputation is fundamentally a social concept; one's reputation is determined by the social esteem held among a bounded group of people, up to and including the public sphere at large.²⁸ It has value in the sense that it gives someone social standing and respect in society. Reputation has been conceptualized as property—something that has economic value—and as dignity—something that has moral value.²⁹

Reputation is determined in the sphere of generalized public opinion, which encompasses individual beliefs but is more than the sum of them—a "generalized perception." What people think their friends, family, coworkers, and other members of their community think is an important determinate of an individual's belief, particularly if one does not have strong opinions about an issue or person. Over time, the beliefs of a subset of society, including what is represented in the media, can shift public opinion and generalized associations as people take cues from those around them who believe differently. If someone is receptive to a claim—if it is congruent with their other beliefs and/or if the claim comes from a source they trust—they may only need to be exposed to it once to form a belief. If they are less receptive to the claim.

Weber, Max (1922/1978), *Economy and Society: An Outline of Interpretive Sociology*, Vol. 2: University of California Press.

Ardia, David S. (2010), "Reputation in a Networked World: Revisiting the Social Foundations of Defamation Law," *Harvard Civil Rights-Civil Liberties Law Review*, 45(2), 261-328, p. 261.

Weber, Max (1922/1978), *Economy and Society: An Outline of Interpretive Sociology*, Vol. 2: University of California Press. Sharman, Jason C. (2007) "Rationalist and constructivist perspectives on reputation." *Political Studies* 55, no. 1: 20-37.

Dewenter, Ralf, Melissa Linder, and Tobias Thomas (2019), "Can Media Drive the Electorate? The Impact of Media Coverage on Voting Intentions," *European Journal of Political Economy*, 58, 245-61. Huang, J., et al. (2021). "Large-scale quantitative evidence of media impact on public opinion toward China," *Humanities and Social Sciences Communications*, 8(1), 1-8.

Heider, Fritz (1946), "Attitudes and Cognitive Organization," *The Journal of Psychology*, 21(1), 107-12, Hummon, Norman P and Patrick Doreian (2003), "Some Dynamics of Social Balance Processes: Bringing Heider Back into Balance Theory," *Social Networks*, 25 (1), 17-49.

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mere exposure, again from a trusted source, can eventually change attitudes through repetition.³³ An individual's receptivity to a claim is based on the process through which people process new information, form beliefs, and integrate beliefs with prior knowledge.³⁴ According to the balance theory of attitudes,³⁵ when people do not have a belief about a person, it is relatively easy to create a belief, particularly when it is congruent with their other beliefs.³⁶ However, once people have a belief, it is harder to change that belief and requires multiple exposures, often from several different, trusted sources.³⁷

i. Reputational Repair

Reputational repair is a matter of public good and must occur in relation to the public sphere and the sphere in which it was originally damaged. To quantify the damage to one's reputation, one must look to the *cost to repair* rather than the *cost to inflict* reputational harm. I therefore provide three models: a model that estimates the impressions that initially created the reputational beliefs, a model to estimate the percentage of readers or viewers who were receptive to those claims, and a model of damages that estimates the cost to repair reputational damage.

Cialdini, Robert B (1987), *Influence*, Vol. 3: A. Michel Port Harcourt, Sterrett, David, Dan Malato, Jennifer Benz, Liz Kantor, Trevor Tompson, Tom Rosenstiel, Jeff Sonderman, and Kevin Loker (2019), "Who Shared It?: Deciding What News to Trust on Social Media," *Digital Journalism*, 7 (6), 783-801.

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), Action control: From cognition to behavior. Berlin, Heidelberg, New York: Springer-Verlag. (pp. 11-39).; Heider (1946); Cacioppo, J. T. and R. E. Petty (1980), "Persuasiveness of Communications Is Affected by Exposure Frequency and Message Quality: A Theoretical and Empirical Analysis of Persisting Attitude Change," Current Issues and Research in Advertising, 3 (1), 97-122.

Heider, Fritz (1946), "Attitudes and Cognitive Organization," The Journal of Psychology, 21 (1), 107-12.

Kunda Z. (1990), The case for motivated reasoning. Psychological Bulletin, 108(3):480-98.; Housholder and LaMarre (2014), Facebook Politics: Toward a Process Model for Achieving Political Source Credibility Through Social Media, *Journal of Information Technology & Politics*, 11:368–382; Festinger, L. (1962), "Cognitive dissonance." *Scientific American* 207(4): 93-106; Kahneman and Tversky (1974), Judgment under Uncertainty: Heuristics and Biases, Vol. 185, No. 4157, pp. 1124-1131.

Cacioppo, John & Petty, Richard (1979), Effects of message repetition and position on cognitive response, recall, and persuasion. Journal of Personality and Social Psychology. 37. 97-109.; Housholder and LaMarre (2014); Weiss, Robert Frank (1969), "Repetition of Persuasion," *Psychological Reports*, 25 (2), 669-70.

ii. Person Brands and Brand Value

Human, or person, brands are "well-known persona[e] who [are] the subject of marketing communications efforts," and have been shown to enhance consumers' feelings of autonomy and relatedness to the brand and others. Starting from attachment theory, scholars have researched the ways in which consumers and audiences form attachments to people—who themselves become brands—through exposure in a media system. Human brands are both biographical people and brands—constellations of meaning—and these two elements form interdependences as the actions of biographical people can affect their brand value. Brand value is the aggregate of associations with a brand. If those associations change, brand value can be diminished.

Person brands can become devalued when unpredictable or unforeseen events occur to them. ⁴² Fournier and Eckhardt (2019), for example, find that mortality, hubris, unpredictability, and social embeddedness underlie the value of human brands and have the potential to build or diminish brand value. As Fournier and Eckhardt say, "the meaning and daily manifestations of person-brands are inherently socially embedded in a web of relationships that the person-brand cannot control, escape, or ignore." ⁴³ That is, if an unpredictable event or claim is made about the person, it affects their brand because of their embeddedness within a social system. ⁴⁴ The

Thomson, M. (2006). Human Brands: Investigating Antecedents to Consumers' Strong Attachments to Celebrities. *Journal of Marketing*, 70(3), 104–119, p. 104.

Dyer (1979), Heavenly Bodies: Film Stars and Society; Thomson (2006); Parmentier, Marie-Agnès, Eileen Fischer, and A Rebecca Reuber (2013), "Positioning Person Brands in Established Organizational Fields," Journal of the Academy of Marketing Science, 41 (3), 373-87; Fournier, S., & Eckhardt, G. M. (2019), Putting the Person Back in Person-Brands: Understanding and Managing the Two-Bodied Brand, *Journal of Marketing Research*, 56(4), 602–619.

⁴⁰ Fournier and Eckhardt (2019).

Keller, K.L. (1993), Conceptualizing, Measuring, and Managing Customer-Based Brand Equity, *Journal of Marketing*, 57:1, 1-22.

Dyer (1979), Heavenly Bodies: Film Stars and Society; Gamson (1994), Claims to Fame: Celebrity in Contemporary America.

Fournier and Eckhardt (2019) p. 611.

⁴⁴ Fournier and Eckhardt (2019).

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damage to a person brand can be severe and lasting. This damage can persist *even when* they are not at fault. 45 It can persist *even when* their primary fans or followers do not believe the claims. 46 Loss of value for a person brand, particularly a person brand that has a general popular following, can be harmed even if only a subset of the public believes the negative claims. Person brands have social and cultural capital. 47 This capital can become harmed, thereby affecting their overall brand value to a popular audience.

Negative associations, if not repaired, persist in the public imagination. On social media, where comments and other content are archived and searchable, these associations linger for many years, if not decades. ⁴⁸ However, if reinforced, these negative associations become even stronger in both the present public and in the long-term memory of those who are receptive to them. ⁴⁹ If not repaired, these long-term associations persist and strengthen attitudes in the receptive audience.

Although it may be difficult to repair reputational damage on social media, it is possible, actionable, and important to the restoration of reputation. As Ardia (2010) notes:

Although the global communication networks that are the hallmarks of our networked society have brought new reputational challenges, they also provide novel solutions to prevent and ameliorate those harms. One such solution is to

David, John (2016), How to Protect (or Destroy) Your Reputation Online: The Essential Guide to Avoid Digital Damage, Lock Down Your Brand, and Defend Your Business: Red Wheel/Weiser.

Luedicke, Marius K, Craig J Thompson, and Markus Giesler (2010), "Consumer Identity Work as Moral Protagonism: How Myth and Ideology Animate a Brand-Mediated Moral Conflict," *Journal of consumer research*, 36 (6), 1016-32.

Brooks, Gillian, Jenna Drenten, and Mikolaj Jan Piskorski (2021), "Influencer Celebrification: How Social Media Influencers Acquire Celebrity Capital," *Journal of Advertising*, 50 (5), 528-47, Parmentier, Marie-Agnès, Eileen Fischer, and A Rebecca Reuber (2013), "Positioning Person Brands in Established Organizational Fields," *Journal of the Academy of Marketing Science*, 41 (3), 373-87.

Baym, Nancy K. (2015). Personal connections in the digital age. John Wiley & Sons. Humphreys, A. (2016). Social media: Enduring principles. Oxford University Press.

Collins, A. M., & Loftus, E. F. (1975). A spreading-activation theory of semantic processing. Psychological review, 82(6), 407. Arpan, L., Rhodes, N., & Roskos-Ewoldsen, D. R. (2007). Attitude accessibility: Theory, methods, and future directions. Communication and social cognition: Theories and methods, 351-376.

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enlist, through legal and social incentives, the help of private online intermediaries such as content hosts and search providers. These intermediaries play a central role in community governance and are often in a position to recognize and respond to reputational harms.⁵⁰

The public in which the reputational harm originally occurred persists on social media and may have limited exposure to traditional media. ⁵¹ Given the fracture of media audiences in the last 10 years, new forms of media are required to reach what was formerly a relatively unified "public" of news readers and TV viewers. Accordingly, an attempt to repair reputational harm must now account for new channels of communication and for the importance of sources in the communication process.

B. Reputational Damage in a Complex Media System

Assessing reputational damage is complex when the public sphere is fragmented by aspects of digital technology such as filter bubbles, political polarization, ranking algorithms, reputational cues, such as followers, and the proliferation of claims both true and false.

Understanding how the "public sphere" is constructed online requires understanding how social media platforms filter and display content and how multiple platforms—traditional television and print in addition to web and social media—disseminate information.

i. The Media System

When a prominent person makes a claim, it enters the media system, a network of platforms and people who circulate information.⁵² As illustrated in Figure 1 below, the media

https://www.pewresearch.org/journalism/2020/01/24/democrats-report-much-higher-levels-of-trust-in-anumber-of-news-sources-than-republicans/.

⁵⁰ Ardia (2010).

Chadwick, Andrew (2017), The Hybrid Media System: Politics and Power: Oxford University Press; Curran, James, Shanto Iyengar, Anker Brink Lund, and Inka Salovaara-Moring (2009) "Media System, Public Knowledge and Democracy: A Comparative Study," European Journal of Communication, 24 (1), 5-26; Gans,

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system consists of press briefings or reports; Associated Press or other syndication; print and web coverage by major print and broadcast news outlets; podcasts and radio; social media posts on Twitter and Facebook or other platforms; comments, retweets, and likes to a story; and, in some instances, re-coverage of the claims themselves in traditional journalism or social media, ⁵³ to say nothing of word-of-mouth conversation and other informal channels such as rumor or gossip. ⁵⁴ The spread of information, particularly when it originates from a high-profile individual like Mr. Trump, is vast and sweeping. The claims of high-profile figures tend to receive more coverage, and more sustained coverage, than others due to the routines of the newsroom and reporting and the effects of status on public attention. ⁵⁵

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Herbert J (2004), Deciding What's News: A Study of CBS Evening News, NBC Nightly News, Newsweek, and Time: Northwestern University Press.

Pfeffer, Jürgen, Thomas Zorbach, and Kathleen M Carley (2014), "Understanding Online Firestorms: Negative Word-of-Mouth Dynamics in Social Media Networks," *Journal of Marketing Communications*, 20 (1-2), 117-28; Tuchman, Gaye (1978), *Making News: A Study in the Construction of Reality*, New York: Free Press; Curran (2009); Messner, Marcus and Marcia Watson Distaso (2008), "The Source Cycle: How Traditional Media and Weblogs Use Each Other as Sources," *Journalism Studies*, 9 (3), 447-63.

Rosnow, Ralph L. and Gary A. Fine (1976), Rumor and Gossip: The Social Psychology of Hearsay: Elsevier.

Grabe, M. E., Zhou, S., & Barnett, B. (1999). Sourcing and Reporting in News Magazine Programs: 60 Minutes versus Hard Copy. Journalism & Mass Communication Quarterly, 76(2), 293–311; Gans, Herbert J (2004), Deciding What's News: A Study of Cbs Evening News, Nbc Nightly News, Newsweek, and Time: Northwestern University Press; Sigal, Leon V (1973), "Bureaucratic Objectives and Tactical Uses of the Press," Public Administration Review, 336-45; Whitney, D Charles, Marilyn Fritzler, Steven Jones, Sharon Mazzarella, and Lana Rakow (1989), "Geographic and Source Biases in Network Television News 1982 - 1984," Journal of Broadcasting & Electronic Media, 33 (2), 159-74.

Radio and Podcasts

Web

Print

TV

URL links in forums other than Twitter
Retweets and Retruths

Estimating the number of impressions for the Statement requires itemizing impressions from each source that disseminated the Statement. As Figure 1 above illustrates, that means that one would need to calculate and then sum the number of impressions from, at a minimum, (1) web and social media, (2) print, and (3) television.

ii. Social Media Impressions

On social media, impressions are estimated by calculating an information cascade.⁵⁷ To model the impact of the Statement, I rely on the prior work in sociology, computer science, and information systems concerning cascades and social networks. To understand what might be needed to change attitudes and repair reputation, I rely on research from social psychology and marketing concerning persuasion, media exposure, and developing effective integrated media campaigns that include social media advertising. A brief overview of prior research is necessary

I have grayed out media types that I am not considering in my quantitative analysis.

Vosoughi, Soroush, Deb Roy, and Sinan Aral (2018), "The Spread of True and False News Online," *Science*, 359 (6380), 1146-51.

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to understand how impressions and damage are calculated.

Networks and Information Cascades. Unlike traditional media, messages travel on social media through a network—a system of users connected by exchanges of information. The network structure—how many connections one has and how many connections those connections have—can determine whether and how fast a message travels through the network. Social capital is represented in the network by the number of followers, or connections, one has, and greatly increases how broadly and deeply a message spreads. If one sends a message, it has the potential reach of not only all of one's followers, but all of their followers as well.

Additionally, false news spreads more broadly, more deeply in the network, and faster online than true news.⁵⁸

Social media is a hybrid of mass and face-to-face communication.⁵⁹ In mass media like television or news, there is typically one source that sends messages out to many readers or viewers (known as one-to-many communication). In face-to-face distribution of rumors, messages are transmitted from one person to another, usually one at a time. In social media, messages are transmitted both through hubs (one-to-many) and dyadically, creating chains of messages called information cascades. The time it takes for the message to move from one person to another in the information cascade is typically a day for traditional media but can be only a few hours to seconds for online communication, leading to rapid dissemination of both true and false news.⁶⁰

Impression Rate. Although the number of followers is a measure of reach, it represents

⁵⁸ Vosoughi *et al.* (2018).

⁵⁹ Humphreys, A. (2016), Social Media: Enduring Principles, Oxford University Press.

⁶⁰ Pfeffer et al. (2014); Vosoughi et al. (2018).

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only the potential impressions of a message. Information competes for attention in any attention economy. Although a message may be tweeted to all followers, it is not necessarily seen by that number of followers for a variety of reasons: only a subset of followers will sign on that day, they follow a certain number of accounts, or ranking algorithms may not prioritize the content. For these reasons, information scientists incorporate an impression rate when calculating social media impressions, which represents the chance that the message was seen by a follower. 62

Engagement Rate. Engagement rate represents the percent of people who engage with—retweet or like—a post. It has two components: 'liking rate' and 'retweet rate'. Here, I computationally consider only a subset of the engagement rate: the retweet rate, which is defined as the percent chance that the message was retweeted (or quote tweeted). Only a fraction of social media posts are seen, and only a fraction of those are retweeted or liked. While not directly used in my calculation of impressions, "liking" can be used in some algorithms to rank or promote content. In short, content that is "liked" by more people is likely to be prioritized and therefore to be viewed by more people. Engagement can be used to understand impact in that it reflects the response to the statement. In social and web forms of media, comments can further constitute and amplify the impact of false information.

Impression vs. Individuals. Scholarship on media viewership has provided two ways to

Davenport, T. H. and J. C. Beck (2013), The attention economy: Understanding the new currency of business, Harvard Business Press.

Wang, L., Ramachandran, A., & Chaintreau, A. (2016). Measuring Click and Share Dynamics on Social Media: A Reproducible and Validated Approach. Proceedings of the International AAAI Conference on Web and Social Media, 10(2), 108-113; https://martech.org/facebook-twitter-impressions/.

A quote tweet is a retweet with comment (https://help.twitter.com/en/using-twitter/types-of-tweets). When reporting the total number of retweets generated by a post, Twitter combines the number of retweets with the number of quote tweets.

Newswhip (2019), 2019 Guide to Publishing on Facebook, http://go.newswhip.com/rs/647-QQK-704/images/Facebook%20Publishing%202019 Final.pdf.

⁶⁵ Vosoughi *et al.* (2018).

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measure audiences: as people and as impressions. New media like social and digital media tends to be measured in impressions⁶⁶ while old media tends to be measured in reach, or people.⁶⁷ One individual may receive multiple impressions. That is, some people may receive multiple exposures to a statement while others may receive only one exposure. I assume that for media broadcast on television, one viewer represents one impression, and I do not consider the number of times a viewer was exposed to a statement during a broadcast, which is conservative. As I will discuss in the Damages section, I also lower my estimate of the number of exposures needed in a corrective campaign in order to account for the fact that the impressions generated by a corrective campaign may reach some people more frequently than others.

Calculating Impressions. To model the total number of impressions in an information cascade, one calculates and sums the number of impressions that occur at each level in the network. ⁶⁸ To calculate the total number of impressions at each level requires also determining how many diffused to the next level of the network, multiplied by the chance those messages were seen, and then adding the number of impressions at the next level, and so on (see Figure 2 below). ⁶⁹

66 https://theraveagency.com/blog/finding-the-value-in-twitter-impressions.

⁶⁸ Vosoughi *et al.* (2018).

⁶⁷ Gensch, Dennis and Paul Shaman (1980), "Models of Competitive Television Ratings," *Journal of Marketing Research*, 17 (3), 307-15, Picard, Robert G (1988), "Measures of Concentration in the Daily Newspaper Industry," *Journal of Media Economics*, 1 (1), 61-74.

Note that I calculate first and second level impressions for Twitter, but only first level impressions for Truth Social due to a lack of data availability on Truth Social.

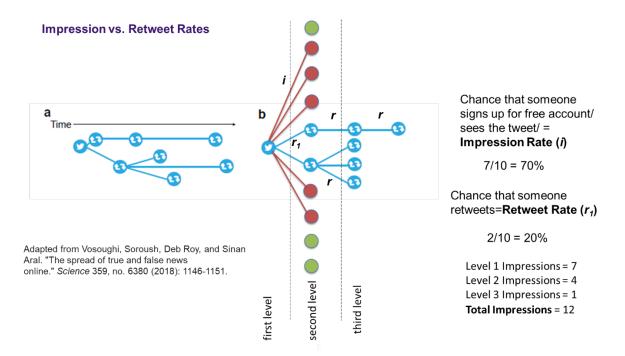


Figure 2. Information Cascade

• Social media. Social media impressions are measured based on the number of followers to an account, the account's estimated impression rate, the number of retweets, the impression rate of retweeters, and their number of followers at the second level.

The Impressions Model section details the particular parameters chosen, given this prior literature and the data presented in the case.

Truth Social. Truth Social is a social media platform that has a parallel structure to Twitter. ^{70,71} It contains profiles that send "Truths" and shares the structure of having followers that are exposed to the messages of those accounts that they "follow." Users can then "re-truth" the statement, which circulates it to their followers, and/or users can engage with the Truth by "liking" it. ⁷² Due to the structural alignment in the platform, Truth Social is conceptually

https://mashable.com/article/inside-truth-social-trump-social-network-tour.

https://www.wsj.com/articles/what-is-truth-social-media-trump-spac-what-to-know-11645552299.

⁷² *Id*.

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identical to Twitter. In cases where I do not have full information about the impression and engagement rates on Truth Social, I have used estimates derived from prior analyses of Twitter. Given that Mr. Trump is one of, if not the most, prominent user of Truth Social, with 4.7 million followers, ⁷³ this is likely an undercount, as I will later discuss.

iii. Traditional Media Impressions

Methods for calculating the number of impressions generated by traditional, mass media have been in use since at least 1942.⁷⁴ Because ratings are tied to advertising revenue, metrics are carefully audited by services like Nielsen and the Alliance for Audited Media (AAM).⁷⁵ Paradigms for measuring circulation and readership are well established in media and communication scholarship.⁷⁶ I therefore use the following measures of impressions:

- *Television*. Television impressions are measured through viewership, the ratings derived from independently audited services like Nielsen. ⁷⁷
- *Print*. Print impressions are measured through circulation, the number of readers as reported by AAM.⁷⁸
- *Web impressions*. Though existing online, articles published on websites tend to be more "traditional" in nature because viewership can be estimated by the amount of traffic or page views. I use the number of daily users, discounted by the bounce rate (the percent of users who do not perform an action on the site).
- *Total impressions*. Total impressions are calculated as the total of impressions across social media, television, print, and web.

⁷³ _https://truthsocial.com/@realDonaldTrump, captured December 7, 2022.

⁷⁴ Buzzard, Karen (2012), Tracking the Audience: The Ratings Industry from Analog to Digital.

https://markets.nielsen.com/us/en/solutions/measurement/television/; https://auditedmedia.com/Solutions/Print-Publisher-Audits.

⁷⁶ Gensch & Shaman (1980): Picard (1988).

https://markets.nielsen.com/us/en/solutions/measurement/television/.

https://auditedmedia.com/Solutions/Print-Publisher-Audits.

C. Assessing Damages for Defamation Online: Adapting Traditional Approaches to the Sphere of Social Media

Traditional approaches to rectifying reputational harm involve attempts to repair reputation in the public sphere. However, social media has complicated these traditional approaches in a few ways. First, some aspects of social media, such as filter bubbles and echo chambers, have fragmented the public sphere such that it is unclear how or where reputation repair can and should take place. Second, trust in traditional media has declined across the ideological spectrum. Whereas legitimate sources of news once went unquestioned, assessing trust of the source is now a primary concern of users when assessing claims both in social and traditional media—and this is true regardless of political ideology. Finally, increasing polarization in the American context means that attitudes have become more entrenched and therefore harder to change. In this section, I provide a brief overview of the theories necessary for understanding how reputational harm can occur, and be repaired, through social media.

Prior cases have taken a traditional approach to assessing damages to reputation in the public sphere. For example, in the case of *United States v. Macys.com, Inc.* (D. Del. July 26, 2000), ⁸⁴ the remedy for alleged violation of consumers' expectations relating to product shipping time was the purchase of banner advertising on search engines to inform consumers about their rights when shopping online. However, the traditional approach represented by prior

https://www.pewresearch.org/fact-tank/2021/08/30/partisan-divides-in-media-trust-widen-driven-by-a-decline-among-republicans/.

⁷⁹ Ardia (2010).

https://www.pewresearch.org/journalism/2020/01/24/democrats-report-much-higher-levels-of-trust-in-anumber-of-news-sources-than-republicans/.

https://www.pewresearch.org/politics/interactives/political-polarization-1994-2017/.

Conover, Michael, Jacob Ratkiewicz, Matthew Francisco, Bruno Gonçalves, Filippo Menczer, and Alessandro Flammini. "Political polarization on Twitter." In *Proceedings of the International AAAI Conference on Web and Social Media*, Vol. 5, No. 1, pp. 89-96. 2011; Prior, Markus. "Media and political polarization." *Annual Review of Political Science* 16 (2013): 101-127.

https://www.ftc.gov/sites/default/files/attachments/training-materials/enforcement.pdf.

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cases fails to take into account the new and complex technological infrastructure for communication, the erosion of trust in mass media, particularly among the audience likely to be receptive to the Statement (*i.e.*, people on the political right and/or supporters of Mr. Trump), ⁸⁵ and the importance of personal sources that are trusted by the individual for news online. Persuasion online now includes influencers, social networking, and live video in addition to search and display advertising. The educational campaign of *United States v. Bayer Corp.*, No. 07-01 (HAA) (D.N.J. Jan. 4, 2007) is more akin to the current state of social media. In this case, an educational campaign was required as remediation that included a consumer brochure, advertisement for that brochure, and placement of the information with key opinion leaders and gatekeepers, such as physicians. In this way, remediation for reputational harm entails working with multiple sources that consumers trust to counter false claims.

D. Media Exposure and Counter-Attitudinal Attitude Change

To understand how to assess the costs for repairing reputational harm in a media system, one must understand the process of attitude change, also known as persuasion. ⁸⁶ Source, message, and even media type can play a role in how many exposures it requires to change attitudes. ⁸⁷ For someone who holds a weak attitude or no attitude about someone or something, one exposure to a message from a reasonably credible source is likely to be enough to change attitudes. ⁸⁸ However, for someone with entrenched beliefs, source and message quality become very important, and changing that belief requires more than a few exposures from a single

https://www.pewresearch.org/fact-tank/2021/08/30/partisan-divides-in-media-trust-widen-driven-by-a-decline-among-republicans/.

⁸⁶ Cialdini R. B., R. E. Petty, J. T. Cacioppo (1981), Attitude and Attitude Change, *Annual Review of Psychology*, 32, 357–404.

Albarracin, D., and Shavitt, S. (2018), Attitudes and attitude change, *Annual Review of Psychology*, 69, 299-327; Cialdini *et al.* (1981).

⁸⁸ Cialdini *et al.* (1981).

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source. ⁸⁹ Due to confirmatory bias, ⁹⁰ people are likely to attend to information that confirms or is congruent with their existing beliefs and ignore or discount information that is counter to them. The more entrenched the belief, the more exposures required to change attitudes. For these reasons, changing an attitude that is counter to one's existing set of beliefs is exceedingly hard and potentially requires multiple messages from multiple trusted sources.

Here, a trusted source means a person or entity that is trusted by the user or reader, not necessarily a source that would be deemed trustworthy by the public at large. Platforms like newspapers and websites can be the source, but they can also convey the information of sources that may or may not be trusted. Research in psychology and communication shows that readers and viewers can distinguish between the media source and the individual source when interpreting a message. For example, a reader may not trust *The New York Times* but may trust direct quotes attributed to a trusted source reported by *The New York Times*.

On social media, attitude change can be even more complex. Filter bubbles mean that users are likely to see only information that is congruent with their present and past beliefs and behaviors⁹² and that comes from selective media sources that viewers trust.⁹³ Due to homophily, we tend to know and follow others who have the same attitudes that we do. As Garrett (2009) notes, multiple messages coming from multiple sources about the same event or fact create the

⁹⁰ Kahneman and Tversky (1974).

⁸⁹ Cialdini *et al.* (1981).

Bakker, Tom, Damian Trilling, Claes de Vreese, Luzia Helfer, and Klaus Schönbach (2013). "The Context of Content: The Impact of Source and Setting on the Credibility of News," *Recherches en Communication*, 40, 151-68.

Pariser (2011), "The Filter Bubble: What the Internet Is Hiding from You."

https://www.pewresearch.org/journalism/2020/01/24/democrats-report-much-higher-levels-of-trust-in-a-number-of-news-sources-than-republicans/.

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impression for the user that the event is indeed true and that the belief is universally held.⁹⁴

In all media, but particularly social media, messages are received, trusted, and interpreted relative to their source. Social capital (*i.e.*, how many people you know) and status (*i.e.*, legitimacy) of a source is important. Messages that come from sources with no social capital (*i.e.*, no followers) do not have the same strength as those that come from sources with considerable social capital. ⁹⁵ Because trust of unfamiliar sources is typically lacking online, ⁹⁶ known and trusted sources are particularly important when communicating messages attempting to change attitudes online. ⁹⁷ In this sense, attitude change requires the message to come from *inside* the filter bubble and requires considering a number of trusted sources within the echo chamber to influence opinion.

In sum, if harm is caused among a population who do not trust traditional media, the most effective way to repair it is through alternative informational channels the audience trusts and that mirror where people get their news. 98

IV. IMPRESSIONS MODEL

The Impressions Model section details the particular parameters chosen, given the prior literature and the data presented in the case. In order to estimate the number of impressions

Garrett, R. K. (2009), Echo chambers online?: Politically motivated selective exposure among Internet news users. *Journal of computer-mediated communication*, *14*(2), 265-285.

Kruglanski, A. W., and Gigerenzer, G. (2011), "Intuitive and deliberate judgments are based on common principles": Correction to Kruglanski and Gigerenzer (2011), *Psychological Review*, 118(3), 522–522. https://doi.org/10.1037/a0023709.

Metzger, M. J., and Flanagin, A. J. (2013), Credibility and trust of information in online environments: The use of cognitive heuristics. *Journal of Pragmatics*, 59, 210–220. https://doi.org/10.1016/j.pragma.2013.07.012.

⁹⁷ Liu, Shixi, Cuiqing Jiang, Zhangxi Lin, Yong Ding, Rui Duan, and Zhicai Xu (2015), "Identifying Effective Influencers Based on Trust for Electronic Word-of-Mouth Marketing: A Domain-Aware Approach," *Information Sciences*, 306, 34-52.

For example, 35% of Republicans reported trusting national news media: https://www.pewresearch.org/fact-tank/2021/08/30/partisan-divides-in-media-trust-widen-driven-by-a-decline-among-republicans/.

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generated by the Statement, I reviewed and analyzed news coverage of the claims, including 17 online news articles, 14 social media posts (13 from Twitter and one from Truth Social), five television broadcasts, and one print article.

A. Web Impressions

The web impressions analysis is limited to a subset of the online news articles cited in the Complaint in footnote 20. In this footnote, the Complaint lists a set of online sources that reported on the Statement. I first evaluated this list for inclusion and exclusion based on whether the statement was prominent, appearing in the first half of the article, and was related to the overall topic of the article. This analysis yielded 17 web articles for inclusion and excluded 48 articles from those mentioned in the Complaint.⁹⁹

To estimate the number of web impressions, I used data provided by Semrush, a company that provides website traffic statistics. ¹⁰⁰ Semrush reports unique monthly visitors, and I transformed this measure to daily visitors by dividing unique monthly visitors by 30. Further, to account for people who visit the site but do not perform any other action, I multiplied daily visitors by 1 minus the bounce rate (see Figure 3 below). A table showing the online articles included in this analysis and the impressions estimate is provided as Appendix D.

Figure 3. Equation 1

Web Impressions = (Unique Monthly Visitors/30)*(1-bounce rate)

Note that the articles that were excluded do include the allegedly defamatory Statement. However, I excluded them as a conservative step because the Statement was not listed prominently in the article.

https://www.semrush.com/kb/26-traffic-analytics.

B. Social Media Impressions

The social media impressions analysis is limited to the set of tweets that (a) link to one of the 17 online news stories I considered in my analysis of web impressions, (b) were published by the primary account of the publisher or the article's author, or (c) contain an image of the Statement made on Truth Social. ¹⁰¹ I identified a total of 13 tweets using these criteria. In all three cases, I limited the analysis to tweets that contain the defamatory Statement when viewed by a user on Twitter.

To measure social media impressions, one must estimate the percent of followers who saw a particular message. As described above, this is called the impression rate. Impression rates vary depending on the number of followers and the other contextual conditions in the system such as competition for attention on any given day. ¹⁰² Impression rates for Twitter are estimated at between 1.3% to 2.6% for typical users. ¹⁰³ However, that range can vary depending on number of followers, publisher/non-publisher status, frequency and relevance of tweets, and other variables. Sites aimed at creating shareable content, including political news, can have impression rates up to 22%. ¹⁰⁴ Account holders can directly view their impression rate for each tweet, but otherwise the information is not publicly available. Buzzfeed, for example, has an impression rate of 22%, which is convergent with conventional marketing goals that aim for a rate of 20%, ¹⁰⁵ but lower than the 30% rate that Twitter suggested in 2014. ¹⁰⁶

These tweets were identified through a search of keywords on Twitter, such as "trump," "carroll," "statement," and "truth social" (https://twitter.com/search?q=<keywords>&src=typed_query&f=image), combined with a manual review of the images in the search results.

Wang et al., 2016; https://martech.org/facebook-twitter-impressions/.

https://martech.org/facebook-twitter-impressions/.

https://martech.org/facebook-twitter-impressions/.

https://www.tweetbinder.com/blog/twitter-impressions/; https://marxcommunications.com/what-does-impressions-mean-on-twitter/.

Ad Age (2014). "Twitter Tells Brands They Can Reach 30% of Their Followers for Free,"

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For the reasons stated above, I therefore divided the tweets into two sets, one set circulated by publishers and highly influential individuals with over 500k followers, who are known to have higher impression rates, and one set of tweets by typical users, who likely have more typical impression rates of 1%. Equations 2a and 2b (low and high publisher impression rates) are applied to publishers/influencers. Equation 2c, using an impression rate of 1%, is applied to the "typical" Twitter user.

For publishers/influencers, I provide estimates based on all publicly available information, using two impression rates. The first estimate comes from Wang *et al.*'s (2016) formula for calculating impressions given the total number of followers in the cascade, retweets, and followers of the original tweet (Equation 2a). ¹⁰⁷ Equation 2a can be used to estimate impressions for each account, given the account's number of followers, the number of retweets, and the followers of the retweeters. This means that each tweet has a unique impression rate. Wang *et al.* (2016) develop this equation from a full set of data taken from Buzzfeed and Buzzfeed News and its associated accounts (average followers at the time of Wang *et al.*'s analysis: Buzzfeed = 2.8 million, BuzzfeedNews = 470,000). Based on a full set of data, they are able to provide an estimate of impressions given known and public data like followers and retweets. As a conservative step, I took into account the potential presence of bots as followers in my estimation although it may be unnecessary in this model. ¹⁰⁸

I account for the potential presence of bots as followers, 12.6%, based on recent estimates

https://www.adweek.com/performance-marketing/twitter-tells-brands-they-can-reach-30-their-followers-free-158886/.

¹⁰⁷ Wang *et al.*, 2016.

This may be an unnecessarily conservative step, as Wang *et al.* (2016) formed their estimate of parameters from a set of known and actual impressions provided by Twitter, which may have already accounted for bots.

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in computer science. ¹⁰⁹ The formula used to calculate impressions using Equation 2a is displayed in Figure 4 below. The formula is applied to the four tweets in the social media impressions analysis from publishers or highly influential individuals (followers > 500,000).

Figure 4. Equation 2a

Social Media Impressions_{publishers} = $10^{\circ}(0.7396 \log(TF*(1\text{-bot rate})) + 0.0473 \log(PF*(1\text{-bot rate})) + 0.1027 \log(RT))$

Where:

PF (primary followers) = number of followers of original tweet RT (retweets) = number of retweets to the original post TF (total followers) = average number of followers of all retweets*RT¹¹⁰ + number of followers of original poster (PF) Bot rate = 0.126

Given the differences between Buzzfeed and some of the publishers in the Twitter dataset, I calculated a second estimate of impressions based on an impression rate of 20% (Equation 2b). Not only was Buzzfeed itself purported to have a rate close to this, but it is also a rate used as a marketing "rule of thumb" as a benchmark for most major accounts. Given the size and the influence of some of the accounts in the dataset, 20% is a reasonable and likely

Luceri, L., Deb, A., Giordano, S., & Ferrara, E. (2019), Evolution of bot and human behavior during elections, *First Monday*, *24*(9), https://doi.org/10.5210/fm.v24i9.10213.

To collect the number of followers for all retweets, I used the Twitter API to search for both retweets and quote tweets (retweets with comment) of each of the 13 tweets considered in the social media impressions analysis. I then filtered out any tweets that do not reference the original tweet (*e.g.*, retweets of quote tweets). After analyzing the data, I found a discrepancy between the number of retweets displayed on www.twitter.com and the number of retweets I was able to collect. The discrepancy is likely due to users whose accounts are private and/or protected, meaning their data is not retrievable using Twitter's API. Using the list of retweets and quote tweets I assembled, I collected the Tweet IDs of each user who posted a retweet or quote tweet and used Brandwatch to collect the follower count of each of the users at the time they posted the retweet or quote tweet. I then averaged the follower counts of each retweeter or quote tweeter for each of the 13 original tweet and multiplied the average by the number of retweets.

https://martech.org/facebook-twitter-impressions/.

https://www.tweetbinder.com/blog/twitter-impressions/.

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estimate for impression rate. Here, I again used 12.6% to account for potential bots. ¹¹³ In this equation, I include impressions at both the first level (*i.e.*, the number of followers of the original tweet and an impression rate of 20%) and the second level of the information cascade (*i.e.*, the number of retweets multiplied by the average number of followers held by people who retweeted and an impression rate of a "typical" Twitter user of 1% ¹¹⁴). The formula used to calculate impressions using Equation 2b is displayed in Figure 5 below. The formula is applied to the four tweets in the social media impressions analysis from publishers or highly influential individuals (followers > 500,000). A table showing the tweets considered and the impressions estimate (using both Equation 2a and Equation 2b) is included as Appendix D.

Figure 5. Equation 2b

Social Media Impressions_{publishers} = followers_{first-level}*first level impression rate*(1-bot rate)+retweets*followers_{second-level}*second level impression rate*(1-bot rate)

Where:

Followers_{first-level} = number of followers of the original tweet First level impression rate = 0.2Bot rate = 0.126Followers_{second-level} = average number of followers of all retweets¹¹⁵ Second level impression rate = 0.01

As stated above, for the accounts of news publications or Twitter users with more than

¹¹³ Luceri et al. (2019).

https://martech.org/facebook-twitter-impressions/.

I used the same process described above to collect data on the average number of followers of all retweets. I collected a list of all retweets and quote tweets of the 13 tweets using the Twitter API. Using that list, I collected the follower counts of all users who published a retweet or quote tweet from Brandwatch. I then averaged the follower counts of each retweeters or quote tweeter for each original tweet and multiplied the average by the number of retweets.

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500,000 followers, I use the same impression rates and methodology as in Wang *et al.* (2016) and all my prior analyses. However, for the more typical Twitter users (under 500,000 followers) who tweeted Mr. Trump's Statement, I use an impression rate of 1% for both first and second level of the information cascade, which is the low-end of impression rates reported publicly. ¹¹⁶ This is applied to the nine tweets in the social media dataset in the social media impressions analysis from "typical" users (those with follower counts < 500,000).

Figure 6. Equation 2c

 $Social\ media\ impressions_{typical} = followers_{first-level}*first-level\ impression$ $rate_{typical}*(1\text{-bot rate}) + retweets*followers_{second-level}*second-level$ $impression\ rate*(1\text{-bot rate})$

Followers_{first-level} = number of followers of the original tweet

First-level impression rate_{typical}=.01

Bot rate = 0.126

Second-level impression rate = .01

Followers_{second-level} = average number of followers of all retweets ¹¹⁷

Twitter Versus Truth Social Impression Rates. For the purpose of this analysis, I assume that Truth Social has the same impression rate structure as Twitter due to their structural similarity (*i.e.*, followers, re-truths, liking, etc.). Mr. Trump has 4.7 million followers on Truth Social. The Statement received 22,219 likes and 6,810 re-truths, an engagement rate of 0.64% which is far higher than the rates seen on Twitter (average engagement on Twitter is 0.037%). 118

https://martech.org/facebook-twitter-impressions/.

I used the same process described above to collect data on the average number of followers of all retweets. I collected a list of all retweets and quote tweets of the 13 tweets using the Twitter API. Using that list, I collected the follower counts of all users who published a retweet or quote tweet from Brandwatch. I then averaged the follower counts of each retweeters or quote tweeter for each original tweet and multiplied the average by the number of retweets.

https://www.rivaliq.com/blog/good-engagement-rate-

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For these reasons, I believe that using Twitter impression rates to estimate the impressions Mr. Trump's Statement received on Truth Social is an undercount.

To infer the Truth Social impression rate, I calculated the median impression rate from Twitter, taking into account both the publisher impressions using the Wang *et al.*'s formula and the typical Twitter user impressions illustrated in Equation 2c. The median rate is 6%, and I therefore use this for the low estimate. The same Twitter impression rate ¹¹⁹ was used for the high estimate.

Figure 7. Equation 2d

Total social media impressions = social media impressions_{publishers} + social media impressions_{typical} + Truth Social impressions_{first level}

C. Television Impressions

To measure television impressions, I relied on the TV News Archive, a database maintained by the Internet Archive, a non-profit archive of content from television, internet, and audio, among many other sources. ¹²⁰ The Internet Archive's TV News Archive allows users to search through the closed captioning of broadcasts. To identify broadcasts to incorporate into the television impressions analysis, I searched the closed captioning of broadcasts for key phrases from Mr. Trump's Statement from October 12 through November 9, 2022, from the following broadcasters: ABC, Fox News, NBC, MSNBC, CBS, and CNN. ¹²¹ After identifying the

twitter/#:~:text=According%20to%20our%202022%20Social,industries%2C%20from%20fashion%20to%20no

https://martech.org/facebook-twitter-impressions/.

https://archive.org/details/tv.

I used the following search query: Trump AND Carroll AND ("complete con job" OR (liars AND cheaters AND hacks) OR (hoax AND and AND lie) OR (promote AND book AND "complete scam") OR "not telling

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broadcasts, I searched the closed captioning further to identify broadcasts that included only verbatim quotes from Mr. Trump's Statement. The search yielded a total of five broadcasts.

To estimate the number of impressions these programs received, I consulted public reports of viewership for each program from US TVDB, ¹²² which are derived from Nielsen. Where possible, I collected P2+¹²³ ratings estimates for the program in which the Statement appeared on the day it was aired. A table showing the broadcasts considered, the ratings estimate, and the source of the rating estimate is included as Appendix D.

D. Print Impressions

I also considered one print article in the Washington Post that mentioned the Statement.

To estimate the number of impressions generated by the *Washington Post* article, I used the data provided by AAM, a widely accepted standard for measuring print audience size that determines advertising rates.¹²⁴

E. Total Impressions

To calculate the total impressions across media, I aggregated views/impressions for the (1) social media impressions (Twitter and Truth Social), (2) TV impressions, (3) print impressions, and (4) web impressions (see Figure 8 below).

Figure 8. Equation 3

Total impressions = social media impressions + TV impressions + print impressions + web impressions

the truth" OR "it never happened" OR "changed her story from beginning to end" OR ("made up a story that I met her" AND swooned) OR "get caught up with details or facts that could be proven wrong" OR "I don't know this woman" OR "have no idea who she is" OR ("not telling the truth" AND "a woman I had nothing to do with")).

https://ustvdb.com/.

P2+ is an estimate of the persons aged 2 or older who watched a program.

https://auditedmedia.com/about/who-we-are.

Figure 9 below summarizes the results of the impressions analysis.

Figure 9. Total Impressions

	Twitter	Truth Social	Web	TV	Print	Total
High	4,828,186	904,000	5,100,593	7,029,000	159,040	18,020,819
Low	1,227,286	271,200	5,100,593	7,029,000	159,040	13,787,119

High = impression rate of 20% for first level followers, 1% for second level followers (Sullivan 2014).

Low = impression rate calculated for publishers (Wang *et al.* 2016).

For individual Twitter users with fewer than 500,000 followers, 1% for both first and second levels and for both High and Low.

The Statement generated between 13,787,119 and 18,020,819 impressions from October 12, 2022, through November 9, 2022, the timeframe from which data were collected for this analysis.

F. Other Impressions Not Included in the Model

There are a number of impressions that my estimate does not take into account. Although I have used Equations 2a and 2b to adjust for different impression rates, I have also omitted some sources of impressions due to data availability or clarity. This makes both estimates a considerable undercount of impressions.

Web Impressions. Online news impressions are limited to the subset of articles cited in the Complaint described above. I did not count other online news articles that covered or discussed the Statement. Additionally, some articles that covered Mr. Trump's statement were authored by the Associated Press. Although it is likely that identical (or very similar) versions of these articles appeared in multiple publications, I did not count these impressions due to the inability to

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access traffic numbers for each of these websites. For instance, the October 12, 2022, AP article, titled "Trump Angrily Lashes Out After His Deposition Is Ordered," appeared in at least 137 additional news outlets; however, I included only the one published on the Seattle Times in my Impressions Analysis. 126

Social Media Impressions. I limited social media impressions to those that quote the Statement directly. While I did consider the retweets and quote tweets of the 13 original tweets, I did not consider in-text quotations or paraphrases of the statement. To measure the information cascade on Truth Social, I count only first-level impressions and not re-truths due to data availability. Additionally, I did not consider any tweets from other publishers of stories covering Mr. Trump's Statement, tweets from users who shared links to the 17 articles (or other articles containing the Statement), or tweets in which users repeated or otherwise amplified the Statement.

The social media impressions analysis does not consider impressions generated on other platforms, such as Facebook and Reddit, because it is difficult to find research or publicly available data on impression rates for platforms other than Twitter. Nonetheless, there is evidence that the 17 online news articles I considered in my web impressions analysis were shared widely on those platforms. Using CrowdTangle, ¹²⁷ a social media insights tool owned and

Larry Neumeister & Jill Colvin, Trump Angrily Lashes Out After His Deposition Is Ordered, THE SEATTLE TIMES (Oct. 12, 2022), https://apnews.com/article/new-york-lawsuits-manhattan-donald-trump-lewis-a-kaplance7b11f1f0e3ea1bec35e8f1f1b929d9.

See, e.g., Larry Neumeister & Jill Colvin, Trump Angrily Lashes Out After His Deposition Is Ordered, YAHOO! NEWS (Oct. 12, 2022); Larry Neumeister & Jill Colvin, Trump Angrily Lashes Out After His Deposition Is Ordered, Denver Post (Oct. 12, 2022); Larry Neumeister & Jill Colvin, Trump Angrily Lashes Out After His Deposition Is Ordered, Daily Herald (Suburban Chi.) (Oct. 12, 2022).

Meta provides a free and publicly accessible CrowdTangle extension for the Chrome browser that allows users to track shares of webpages across multiple social media platforms (https://apps.crowdtangle.com/chrome-extension). For each share in CrowdTangle's database, the Chrome extension provides a list of each share, the

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operated by Meta, ¹²⁸ I searched for instances where the 17 articles were shared on Facebook and Reddit. CrowdTangle data were available for 16 of the news articles considered, establishing a total of 101 shares and 11,966 interactions, disseminated to 132,875,540 followers. ¹²⁹ Given the high number of shares and the overall number of followers associated with those shares, it is clear that my estimate of social media impressions is a significant undercount of the actual impressions generated.

Television Impressions. To calculate television impressions, I again limited the search to television programs that directly quoted the Statement. Television impressions included in this analysis were limited to broadcasts contained in the Internet Archive's TV News Archive database from the following broadcasters: MSNBC and Fox News. ¹³⁰ I did not include television shows that paraphrased but did not directly quote Mr. Trump's Statement or YouTube, Rumble, or podcast streams.

For these reasons, the estimate of impressions I provide is a conservative estimate in which several sources of further dissemination were not taken into account. A summary of conservative steps taken in the impressions analysis is included in Appendix H.

V. IMPACT ASSESSMENT

In this section, I provide an impact assessment to evaluate the nature and amount of harm

number of interactions (*i.e.*, the number of reactions, upvotes, likes, comments, and shares) generated by that share, and the total number of followers associated with the share. (Followers are defined as "The sum of Page Likes, Instagram followers, Twitter followers, or Subreddit subscribers for all of the matching results.") The browser extension does not track reach or impressions generated by a post nor does the list of shares incorporate data from private or restricted accounts.

https://help.crowdtangle.com/en/articles/4201940-about-us.

To arrive at the total number of followers, I summed together all the followers associated with each share. It was not possible to deduplicate unique followers across different articles and channels.

¹³⁰ I searched across the following major networks: ABC, Fox News, NBC, MSNBC, CBS, and CNN. My search yielded suitable results only from Fox News and MSNBC.

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done to Ms. Carroll's person brand as a result of Mr. Trump's Statement. The impact of this Statement should be viewed both qualitatively and quantitatively.

In the qualitative assessment, I assess the nature of the Statement and its more generalized harm and ongoing harm to a brand whose value derives from a general (rather than niche) public. I also take into account the nature of the associations and their likely harm to the person brand of a professional woman and assess the long-term nature of this harm. These are dynamics that occur on the sociocultural level and therefore require a more qualitative assessment. Further, they impact the generalized social perceptions of Ms. Carroll, thereby diminishing her reputational value to speak to a broad and diverse public. As such, this kind of reputational harm may impact her ability to capitalize on her person brand in the future.

I also provide a quantitative impact assessment to link the impressions estimate with the damages estimate. How many people saw and might have believed or been receptive to Mr. Trump's Statement? There are some who would have read/heard his Statement and dismissed it out of hand. While the Statement itself may represent some generalized harm, to calculate a fair estimate to rectify the more specific harm, one must take into account the fact that not everyone may have read/heard and readily believed Mr. Trump's Statement. Yet, political science provides tools for estimating the quantitative impact by incorporating the likelihood that a reader or viewer would have been receptive to Mr. Trump's Statement.

A. Qualitative Impact Assessment

To conduct the qualitative impact analysis, I considered Ms. Carroll's brand prior to June 2019, the damage to her brand after June 2019, and an assessment of the social media and news coverage after Mr. Trump's Statement on October 12, 2022. The materials I relied on to assess

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Ms. Carroll's brand include media coverage of Ms. Carroll both before and after Mr. Trump's Statement, ¹³¹ Amazon reviews of her books, ¹³² and negative social media comments generated after the Statement. I understand that Mr. Trump's at-issue Statement was published after he made three similar statements on June 21, 22, and 24, 2019, which are not at issue in this case. Given that the allegedly defamatory statement on October 12, 2022, reinforced and furthered negative associations introduced in the statements on June 21, 22, and 24, 2019, when considering the strengthening of the negative associations, I found it fair and necessary to assess Ms. Carroll's brand prior to June 21, 2019 (*i.e.*, the time before Mr. Trump made any comments that were disseminated to the press regarding Ms. Carroll's alleged encounter with Mr. Trump).

i. Ms. Carroll's Professional Career

Prior to June 21, 2019, Ms. Carroll was a popular advice columnist at *Elle* Magazine, where she had been a mainstay for 25 years. ¹³³ Her brand personality was that of a sassy dating advice columnist and author of books on a range of topics, including dating, culture, and the life of Hunter S. Thompson. As the columnist of "Ask E. Jean" at *Elle*, she reached about 4.5 million readers, according to her publisher. ¹³⁴ Ms. Carroll was known widely for her personable, modern advice for women. ¹³⁵ Over the years of her popularity, she was heralded as "feminism's answer to Hunter S. Thompson." ¹³⁶ She is the author of *A Dog in Heat Is a Hot Dog and Other Rules to*

Proquest search query of US Newstream: (e jean carroll) AND (stype.exact("Newspapers") AND ps.exact("Carroll, E Jean")).

https://www.amazon.com/product-reviews/0060530286 and https://www.amazon.com/product-reviews/0525935681/.

Deposition of Robbie Myers, October 12, 2022, 31:20-22, 32:4-12; https://www.nytimes.com/2020/02/19/business/media/e-jean-carroll-elle.html.

https://web.archive.org/web/20200520030235/http:/www.ellemediakit.com/r5/showkiosk.asp?listing_id= 5748326. I was unable to find readership data prior to 2020.

Deposition of Robbie Myers, October 12, 2022, 23:7-24:4.

Quammen, David, "A Cheap Hide Out for Writers." N.Y. TIMES. 01 Nov 1981: A.14.

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Live By (1996) and *Mr. Right, Right Now!* (2005), books that offer "sassy" dating and personal advice. ¹³⁷ Former *Elle* editor-in-chief Robbie Myers, who until 2017 was Ms. Carroll's boss, ¹³⁸ described her as a gifted, beloved writer:

[T]he term that came to mind is sort of she's a baller, meaning [] as a writer. She's a gifted writer. She is a journalist first and everything that she writes is informed by that, meaning the facts, but she—she also [] has a lot of wit and I think that's why her readers loved her so much. 139

Ms. Myers noted Ms. Carroll's high public profile and credited her with elevating the national advice column genre and building trust with her readers by being witty but grounded in the facts of journalism:

I mean, what other people are doing is great, right, and it's fun and interesting, but women really trusted E. Jean and we got lots of feedback from readers that she helped them. Also, you know, they loved her voice because she puts a lot of funny in there . . . but it's always undergirded by reporting. 140

It should also be noted that Ms. Carroll built her person brand amongst a general and diverse audience. Ms. Carroll initially built her following at *Elle*, where she had over 4.5 million readers weekly. The *Elle* audience appears to be general readership that roughly represents the ideological composition of Americans, of which roughly 30% identify as conservative. This would seem to indicate that she had a broad public following for her books and other journalism.

Joan Kelly, "Get a Grip and Take Some Sassy but Sane Advice from Elle's E. Jean." Newsday. 22 Mar 1994: B 13

Deposition of Robbie Myers, October 12, 2022, 9:11-13.

Deposition of Robbie Myers, October 12, 2022, 21:15-22.

Deposition of Robbie Myers, October 12, 2022, 22:12-18.

http://www.ellemediakit.com/r5/showkiosk.asp?listing_id=5748326.

http://www.ellemediakit.com/r5/showkiosk.asp?listing_id=5748326; https://www.nytimes.com/interactive/2019/08/08/opinion/sunday/party-polarization-quiz.html

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ii. Reception to Ms. Carroll's Professional Work

Ms. Carroll was known to her readers as a "a sharp and funny social commentator, and a terrific journalist," offering "sassy female insights." Ms. Carroll was noted for dishing out "SASSY BUT SANE ADVICE," "E. Jean's PUNCHY wisdom SHINES in compilation." 145

"E. Jean Carroll, with her razor-sharp insights and wildly popular way of serving them up to the masses, is, above all else, a truth-seeker." ¹⁴⁶

"She's a real writer, a sharp and funny social commentator, and a terrific journalist, and I love her voice. Smart readers will be particularly impressed with her skill reporting the current research in sex and marriage. I admire the way she covers the waterfront. She goes to rock-climbing spots, moto-cross tracks, gun clubs, university labs, millionaires' cocktail parties. About halfway through, I realized, this woman is an explorer. I think we're lucky that someone with her quality of mind and sense of humor has turned her attention to one of the most frustrating dilemmas of contemporary women: how to find someone real to love."

After June 2019, the associations with Ms. Carroll's person brand shifted. One way to examine the shift in associations is through word association, as represented in a word cloud. As can be seen in Figure 10 and Figure 11 below, the semantic associations shifted from those associated with her role as a sassy news columnist ("love," "advice," and "men") to being associated with Mr. Trump, sexual assault, the previous defamation case Ms. Carroll filed against Mr. Trump, and the present case ("defamation," "justice"). While some shift was attributable to the publication of her memoir and *New York Magazine* piece in which she detailed

https://www.amazon.com/gp/customerreviews/RD84I3FPD8DS1/ref=cm cr arp d rvw ttl?ie=UTF8&ASIN=0060530286.

https://www.amazon.com/gp/customer-reviews/RBTLK02LIQ4ED/ref=cm_cr_arp_d_rvw_ttl?ie=UTF8&ASIN=0060530286.

Dan. "E. Jean's PUNCHY wisdom SHINES in compilation." Indianapolis Star. 31 Mar 1996: D.6.

https://www.amazon.com/gp/customer-reviews/R2KGOC1J5G6VTR/.

Humphreys, A. and R. Jen-Hui Wang, (2018) Automated Text Analysis for Consumer Research, Journal of Consumer Research, Volume 44, Issue 6, Pages 1274–1306.

Proquest search query of US Newstream: (e jean carroll) AND (stype.exact("Newspapers") AND ps.exact("Carroll, E Jean")).

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the alleged encounter with Mr. Trump, ¹⁴⁹ Mr. Trump's response likely played a considerable role in shifting the nature and valence of associations with her name.

Figure 10. Before June 2019 (top 200 words in news articles about E. Jean Carroll)



https://www.thecut.com/2019/06/donald-trump-assault-e-jean-carroll-other-hideous-men.html.

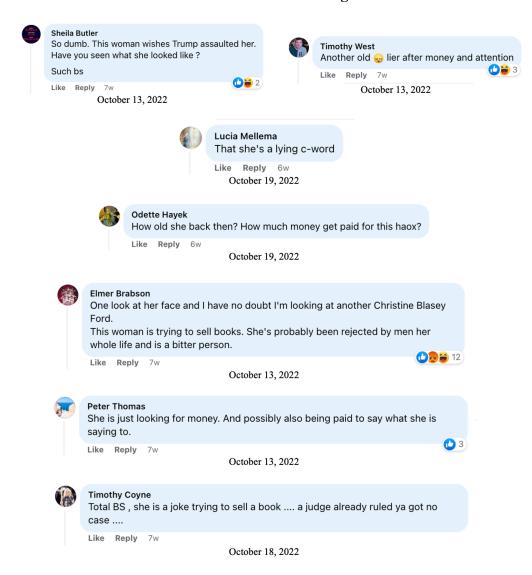
Figure 11. After June 2019 (top 200 words in news articles about E. Jean Carroll)



iii. Qualitative Evidence of Impact

Mr. Trump's Statement and subsequent videos on Truth Social were made and began being circulated on October 12, 2022. Just after releasing the Statement, the allegedly defamatory claims about Ms. Carroll rose to prominence on social media. For example, on Facebook in response to the news articles that repeated his claim, users like Odette Hayek picked up the same claim, saying "How much money get paid [sic] for this hoax?" and that she was "trying to sell books" (October 19, 2022). Others labeled her a "lier" [sic] looking for "money" and "attention," (October 13, 2022). These terms and the framing of Ms. Carroll's allegation derive directly from language used in Mr. Trump's Truth Social Statement (e.g., hoax, liar, etc.). Once again, posts arose attacking Ms. Carroll's credibility (Figures 12 and 13). Similar examples of users repeating language from Mr. Trump's Statement or directing general vitriol toward Ms. Carroll in response to Ms. Trump's Statement are displayed in Figure 12 and Figure 13 below.

Figure 12. Sample of Facebook Comments Responding to News Articles Posted on Publication's Facebook Pages 150



https://www.facebook.com/nytimes/posts/pfbid034f8wyVEE9LSkXgVQe1PqZW2jgNN12EpsouZWRuhqUtQp HExUiAZRM9NNVWpewT9G1?comment id=5600395803407358;

https://www.facebook.com/nytimes/posts/pfbid034f8wyVEE9LSkXgVQe1PqZW2jgNN12EpsouZWRuhqUtQpHExUiAZRM9NNVWpewT9Gl?comment_id=1235320900356499;

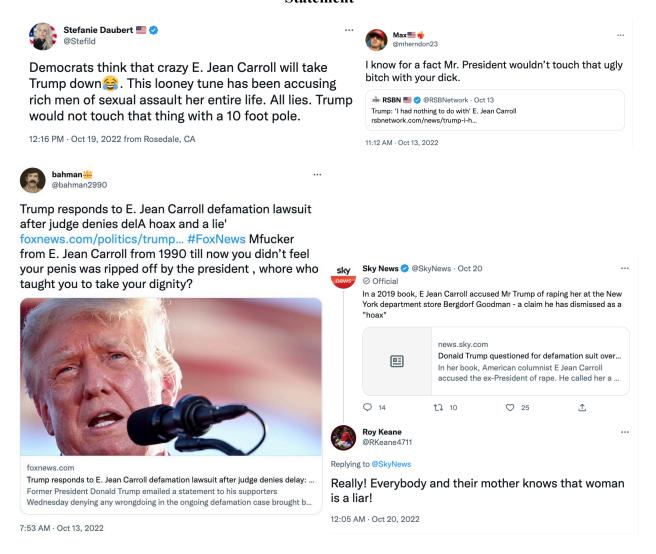
https://www.facebook.com/FoxNews/posts/pfbid02qvfCtHMJMGk9Lwpmg8YuGyUDWo7iX4PADFmmRfiZZ1GcnYbZY3mvXuT4PT2ded8vl?comment id=635626811503742;

https://www.facebook.com/FoxNews/posts/pfbid02qvfCtHMJMGk9Lwpmg8YuGyUDWo7iX4PADFmmRfiZZ1GcnYbZY3mvXuT4PT2ded8vl?comment id=807621376955040;

https://www.facebook.com/FoxNews/posts/pfbid02qvfCtHMJMGk9Lwpmg8YuGyUDWo7iX4PADFmmRfiZZ1GcnYbZY3mvXuT4PT2ded8v1?comment id=3361166484105968;

https://www.facebook.com/FoxNews/posts/pfbid02qvfCtHMJMGk9Lwpmg8YuGyUDWo7iX4PADFmmRfiZ

Figure 13. Sample of Twitter Commentary about Ms. Carroll Following Mr. Trump's Statement¹⁵¹



Mr. Trump's Statement and the widespread circulation this statement received on social media depicts Ms. Carroll as the perpetrator of a "con job" who is seeking to make money and perpetrating a "hoax." One should note that the claims and the vitriol aimed at Ms. Carroll and

Z1GcnYbZY3mvXuT4PT2ded8vl?comment id=1313452902545808;

https://www.facebook.com/vicenews/posts/pfbid02xyYRYJic1JvqRnPaXUYhsgi77Dbnot7H94ecmfDKhmpW VpMALi9EJLhdx84WRqJ2l?comment id=501843185157034501843185157034.

https://twitter.com/Stefild/status/1582782819041873923;

https://twitter.com/mherndon23/status/1580592423042158592;

https://twitter.com/bahman2990/status/1580542210809815040;

https://twitter.com/RKeane4711/status/1582961054652321798.

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circulated in the public sphere due to Mr. Trump are not new. I observed a similar negative reaction after Mr. Trump initially responded to Ms. Carroll's allegations in his June 2019 statements to the press. ¹⁵² The reiteration of the allegedly defamatory claims about Ms. Carroll makes attitudes about Ms. Carroll again accessible and brings them to the top of peoples' minds, which further denigrates Ms. Carroll's person brand. ¹⁵³ The new Statement reengages the receptive public with the claims, which strengthens the attitudes of those who have heard the similar claims previously, and creates new associations for those who have not yet heard it. Appendix E contains examples of negative sentiment towards Ms. Carroll on social media. In terms of Ms. Carroll's attempts to rebuild her brand, it is critically destructive.

B. Quantitative Impact Assessment

In addition to a qualitative analysis of the tenor and nature of the impact of Mr. Trump's Statement on Ms. Carroll's person brand, I conducted a quantitative analysis to assess the portion of impressions calculated in the impressions analysis that would have been made to a receptive audience (the "receptive impressions"). To approximate the receptive impressions, I used estimates of the percent of the readership/viewership who identify as Trump supporters and/or are Republicans and estimates of the percent of Republicans who did not find allegations of sexual harassment and sexual assault made against Mr. Trump to be credible. I then discounted the total number of impressions generated by the Statement (as calculated in the Impressions Model) by the estimated percent of receptive impressions.

¹⁵² See Carroll I Complaint.

Krosnick, J. A. (1989). Attitude importance and attitude accessibility. Personality and Social Psychology Bulletin, 15(3), 297-308. Arpan, L., Rhodes, N., & Roskos-Ewoldsen, D. R. (2007). Attitude accessibility: Theory, methods, and future directions. Communication and social cognition: Theories and methods, 351-376.

i. Readership Analysis

Readership Based on Pew Data. I based my estimates for the receptive audience on estimates from a Pew Research survey conducted between October 29 and November 11, 2019, making it a reasonable approximation of the composition of readership of the sources where the Statement appeared. Patterns of media use by party have remained largely stable since that time, as trust in traditional media among Republicans has continued to decline. The survey data and documentation are publicly available. The Pew survey is "a national, probability-based online panel of adults living in households in the United States" and generated 12,043 responses collected from a nationally-representative sample.

The following variables were used in the analysis:

- SOURCEUSE: "Please click on all of the sources that you got political and election news from in the past week. This includes any way that you can get the source. If you are unsure, please DO NOT click it. [KEEP IN SAME ORDER AS SOURCEHEARD]"
- PARTY: "In politics today, do you consider yourself a: ASK IF INDEP/SOMETHING ELSE (PARTY=3 or 4) OR MISSING: PARTYLN As of today do you lean more to..."
- THERMO: "We'd like to get your feelings toward a number of people on a 'feeling thermometer.' A rating of zero degrees means you feel as cold and negative as possible. A rating of 100 degrees means you feel as warm and positive as possible. You would rate the person at 50 degrees if you don't feel particularly positive or negative toward them." (recoded to Trump receptive if value was >=50).

Receptivity Based on YouGov Poll. Not every Republican is necessarily inclined to be

While the survey is from late 2019, I think it is unlikely that readership patterns have changed significantly since that time. I was unable to find a more up-to-date survey with a similarly reliable and robust methodology.

https://www.pewresearch.org/fact-tank/2021/08/30/partisan-divides-in-media-trust-widen-driven-by-a-decline-among-republicans/.

The data from this study were downloaded and produced. Pew Research Center's American Trends Panel Wave 57, Pathways to Election News Project, November 26, 2019, https://www.pewresearch.org/journalism/dataset/american-trends-panel-wave-57/.

With a probabilistic sample of this size, the sampling error was ± 1.43 percentage points, https://www.pewresearch.org/our-methods/u-s-surveys/the-american-trends-panel/.

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receptive to Mr. Trump's Statement. For that reason, I corrected by discounting according to the percent of Republicans who either (1) found the various allegations of sexual harassment and assault made against Mr. Trump to not be credible (49%) or (2) needed more information (27%), for a total of 76%. ¹⁵⁸ I did not include those who were unsure. These responses indicate a reasonable expectation that the respondent either already believed Mr. Trump's Statement or was open to believing them, given their other beliefs and their current lack of information (*i.e.*, they did not select that they did believe the allegations made against Mr. Trump were credible).

I performed the following calculations:

- Percent Republicans = percent of a publication's audience that are Republican 159
- Percent Receptive Republicans = Percent Republicans * Percent of Republicans receptive to the claims (.76, YouGov)
- Percent Trump Supporters = sum of all people who were receptive towards Mr. Trump ¹⁶⁰

Based on this analysis, I can conclude that an average of 21.42 % of the impressions associated with each publication were to individuals inclined to be receptive to the Statement of Mr. Trump. As can be seen in Figure 14 below, the minimum receptive audience was 11.25% (*Huffington Post*), while publications like the *Daily Caller* had a more receptive audience of 68.63%.

I considered all people who listed a "feeling thermometer" greater than or equal to 50 to be receptive to Mr. Trump (*i.e.*, THERMO>=50).

https://today.yougov.com/topics/politics/articles-reports/2020/05/06/how-americans-view-sexual-assaultallegations-poll. As mentioned above, I was unable to find a more up-to-date polling data measuring Republicans' beliefs about the credibility of sexual assault allegations made against Mr. Trump.

Republicans were identified as PARTY=1 in the raw data.

Figure 14. Percentages of Republican or Republican-Leaning Readers/Viewers and the Percentage of Trump Supporters for Each Publication¹⁶¹

Publication	Percent Republican	Percent Receptive Republicans	Trump Supporters
The New York Times	16.3%	12.39%	13.7%
ABC	34.7%	26.37%	32.5%
Washington Post	18.1%	13.76%	14.6%
Huffington Post	14.8%	11.25%	12.4%
Fox News	69.8%	53.05%	68.2%
MSNBC	20.5%	15.58%	19.9%
Newsweek	23.1%	17.56%	20.9%
Average		21.42%	

To calculate the final number of impressions to a receptive audience, I took the lowest of these variables, which is the Receptive Republicans, and multiplied the impressions generated by each media source by that percent. Data was not available for some of the publications considered in the Impressions Model. I used the average for all other publications if data was unavailable for a specific publication. Multiplying the impressions estimate from the Impressions Model by the Percent Receptive Republicans yields the percent of impressions made to people who were receptive to them. This estimate of the receptive impressions can then be carried forward to assess how much it would cost to repair reputational damage with this population. The formula used to calculate receptive impressions is displayed in Figure 15 below. The formula is applied to each of the media analyzed in the Impressions Model.

Pew Research Center's American Trends Panel Wave 57, Pathways to Election News Project, November 26, 2019.

Figure 15. Receptive Impressions Calculation

Receptive Impressions = Percent Republicans * Percent of Receptive Republicans * Impressions Estimate

Where:

Percent Republican = percent of a publication's audience that are Republican Receptive Republicans = Republicans receptive to the claims (.76, YouGov)¹⁶² Impressions Estimate = the total impressions from the Impressions Model

Figure 16 below summarizes the total receptive impressions generated by the Statement.

Appendix F includes the detailed results of the quantitative impact model.

Figure 16. Total Receptive Impressions

	Social Media	Truth Social	Web	Print	TV	Total
High	2,252,842	193,647	1,178,390	21,878	2,002,968	5,649,724
Low	502,796	58,094	1,178,390	21,878	2,002,968	3,764,125

The quantitative impact analysis uses information about readership, political ideology, and receptivity given political ideology to calculate the number of impressions generated by Mr. Trump's Statement that were made to a receptive audience. Certainly, as detailed in the qualitative impact analysis and impressions analysis, the Statement caused sufficient harm to Ms. Carroll's brand to a general public, meaning individuals across the ideological spectrum. The quantitative impact analysis provides an estimate of the target audience for a corrective campaign. That said, the total harm done to Ms. Carroll's brand in the eyes of the generalized public exceeds the very limited bounds of this quantitative impact and damages calculation. Appendix H includes a summary of the various reasons why the quantitative impact analysis is an undercount.

If data related to Percent Republicans is not available, the equation is as follows: the average Percent Receptive Republicans (21.42%) * Impressions Estimate.

VI. MODELING THE COSTS FOR REPUTATION REPAIR

A. Modeling Reputation Repair on Social Media

As detailed in the theoretical background section above, defamation causes harm to one's reputation in the public sphere. As a corrective measure to repair reputation, an advertising and strategic communications plan can attempt to change attitudes that may have been affected by Mr. Trump's Statement. This section details the methodology for calculating the costs to repair reputation damage via social media channels. The costs to repair the reputation are based on the estimates of the number of receptive impressions. The goal of the corrective campaign is to counteract the number of receptive impressions generated by the Statement, enabling Ms. Carroll to repair the damage done to her person brand by Mr. Trump. The best way to allocate spending on media for this kind of campaign would be to create a media mix that is based on how the target audience gets their information. ¹⁶³ Further, a particular group that does not trust traditional media, such as those who identify as Republicans and/or support Mr. Trump, requires alternative information channels that they do trust.

i. Campaign Goals, Platforms, and Measurements

In my opinion, and given the prior literature summarized in Section II, a campaign to repair reputational damage must include (i) hiring influencers whom the audience regards as trusted sources, (ii) circulating statements in multiple media to replicate the echo chambers in which they originated, (iii) ensuring that the audience is exposed to the message multiple times in order to create attitude change, and (iv) extending for a long enough time to allow for dissemination, given what is known about the slow spread of true versus false claims online 164

¹⁶³ Ardia 2010.

¹⁶⁴ Vosoughi *et al.* (2018).

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and the multifaceted nature of effective corrective repair through online channels (e.g., United States v. Bayer Corp., No. 07-01 (HAA) (D.N.J. Jan. 4, 2007). A holistic social media campaign that includes these integrated elements is therefore the most effective way to repair reputational damage in this case. 165

An effective social media campaign to repair reputational damage must be multi-pronged and include a mix of platforms and people. A typical social media campaign will combine display and search advertising along with hiring influencers to promote a message via blogs and on their Instagram, YouTube, and other channels. Production costs for video and to promote content are often also included. Because the source—and not just the message—is so critical to attitude change, particularly on social media, it is important to work with credible and likeable sources likely to gain traction with the intended audience. For this reason, hiring social and mass media influencers is critical to one's ability to repair reputational damage.

ii. Media Mix

To allocate media budget and media spend across each platform, I relied on the Pew data previously cited in the impact analysis. Using the Pew data, I conducted an analysis of the ways individuals who identify as Trump supporters reported getting their news (see Figure 17 below). Respondents who identified as Trump supporters ¹⁶⁶ were asked "what is the most common way you get political and election news?" News websites or apps were the most commonly cited media used, with 23.1%. I added this together with social media (13%) to allocate the online and

Shankar, V., and Kushwaha, T. (2020), Omnichannel Marketing: Are Cross-Channel Effects Symmetric? International Journal of Research in Marketing; Payne, E. M., Peltier, J. W., & Barger, V. A. (2017), Omnichannel marketing, integrated marketing communications and consumer engagement: A research agenda. Journal of Research in Interactive Marketing, 11(2), 185–197.

I analyzed the media habits of Trump supporters (THERMO variable >50), as that was the closest reflection of the receptive Republican audience in the Pew data.

influencer budget. The next most common responses were cable (21.3%), local (15.6%), and national network television (14%), which I allocated to the mass media budget. I allocated radio (9.1%) and print (3.4%) accordingly as well, using publicly available data on rates for these media channels.

Figure 17. The Media Mix of Respondents who Identify as Trump Supporters

	Frequency	Percent	Valid Percent	Cumulative Percent
Print newspaper or magazines	162	3.4	3.4	3.4
Radio	438	9.1	9.1	12.5
Local television	748	15.6	15.6	28.1
National network television	669	14	14	42.1
Cable television	1020	21.3	21.3	63.3
Social media	623	13	13	76.3
News website or app	1109	23.1	23.1	99.5
Refused	26	0.5	0.5	100
Total	4795	100	100	
		99.5		

To estimate the cost for repair on each platform, two measurements are used as the industry standard. To assess the number of impressions, one can use the cost per thousand impressions, otherwise known as cost per mille (CPM) to estimate how many impressions would be gained for each dollar spent and cost per click (CPC) to estimate the number of engagements each dollar is likely to yield. For each channel, I calculated either the CPM or CPC multiplied by the number of receptive impressions generated by the Statement (as discussed, below I also incorporated an attitude-change multiplier to account for the fact it takes multiple exposures to change an existing attitude). I also included costs to have social and mass media influencers share the message across their channels, similar to the method in which Mr. Trump's Statement

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was spread and that mirrors the ways in which Trump supporters get their news, according to analysis of the Pew Research poll. ^{167, 168} Due to an overlap in influencers across social media platforms, I assume that Truth Social impression rates and costs are similar to the lowest-cost social media platform. ¹⁶⁹

Costs of advertising were calculated as CPM or CPC multiplied by the target number of impressions of each channel or platform. Whether to use CPM or CPC in a cost calculation depends on the goal of the campaign. Annual industry benchmark reports of CPM and CPC for different channels and platforms published by research firms and advertising networks are used in the damages model to estimate costs for reputation repair. When the cost of advertising of a specific channel could be calculated from either CPM or CPC, I used CPC in the final cost of this channel in order to ensure attitude change/conversion. For influencer promotion and mass media advertising, only CPM was used for cost calculation because CPC is usually not available.

iii. Attitude Change Multiplier

As covered in the aforementioned psychological literature, an attitude is not changed by one impression alone. In order to actually change attitudes, a campaign would need to serve multiple impressions per person; showing someone a counter-attitudinal message one time will not change their attitude. This is true in traditional media, ¹⁷⁰ but it is particularly true in the crowded attention marketplace of social media. While prior research has found that it requires

Truth Social was not available when the Pew Research Survey was conducted in 2019. A survey conducted by Pew in 2022 indicates that 2% of people get their news from Truth Social, https://www.pewresearch.org/fact-tank/2022/11/18/key-facts-about-truth-social-as-donald-trump-runs-for-u-s-president-again/. However, because of its centrality to the receptive audience, I would include it in the campaign under Social Media.

Pew Research Center's American Trends Panel Wave 57, Pathways to Election News Project, November 26, 2019.

https://www.axios.com/2022/01/25/trump-truth-social-influencers.

¹⁷⁰ Cacioppo and Petty (1980).

about 3 to 5 impressions to change an attitude in traditional advertising exposure, on social media the number of exposures is likely much higher. Taking into account the attention environment, the strength of attitudes, and the impression rate (likelihood of an exposure leading to an actual impression), I estimate that a message would need to be seen approximately 3 to 5 times on social media *from a credible source* before it would lead to attitude change. For some audiences, 7 times may be more appropriate. For some audiences, it would be impossible to change attitudes. However, as I will discuss, contingent on a prior campaign, the number of exposures needed to change attitudes could be lower.

iv. Potential Overlap in Impressions

As mentioned above, the aim of the corrective campaign is to repair the harm to Ms. Carroll's brand caused by the receptive impressions. Yet the literature on attitude change multipliers is based on individuals and not impressions (*i.e.*, one individual would require between 3 and 5 impressions to change attitudes). It is possible that the proposed campaign, which is measured in impressions, could serve multiple impressions to one individual, even without an attitude change multiplier. In order to account for this potential overlap, I provide estimates as low as a multiplier of 1, which would undercover the number of impressions needed for attitude change. For informative purposes, the damages model that I include provides a range of attitude change multiples, from 1 to 5.

Empirical data suggest that a multiplier of 1 is often overly conservative, especially given the media habits of the audience who were likely receptive to the Statement. Using the Pew dataset referenced previously, I conducted an analysis of media habits of Trump supporters. The

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data show that Trump supporters¹⁷¹ are more likely to use only one news source (37% vs. 27% for non-Trump supporters), and they are more likely to use cable news than non-Trump supporters (21% vs. 16%). ¹⁷² If the audience tends to consume one news source, it is unlikely that they will receive multiple impressions from a campaign with a frequency multiplier of 1. A campaign that would actually change attitudes for this audience would need to show multiple impressions, particularly to those who only use one primary news source (the others would be likely to get multiple impressions if they use more than one news source). ¹⁷³ However, it may be the case that if a previous campaign had been run, the need to expose the audience to the message multiple times would be moot. Taking into account the potential overlap of impressions per person in this instance, the damages model therefore presents a conservative range from 1 impression to 5 impressions.

B. Costs of the Corrective Campaign

Figure 18 below shows the total costs of the corrective campaign. I include three costs: a low estimate, which incorporates an attitude change multiplier of 1; a medium estimate, which incorporates an attitude change multiplier of 3; and a high estimate, which incorporates an

Because the survey did not have a "receptive Republicans" measure and I could not infer it on an individual level, I used survey respondents who indicated support for Trump. According to my prior analysis, this percentage is roughly equivalent to receptive Republicans.

The most common way Trump supporters get their news is through a news website (23.1%), followed closely by cable television (21.3%). Although only 13% report commonly getting news from social media, 43.4% report often or sometimes getting news from social media (17.9% reporting that they often get news from social media). The most common sources for political news by media can be found by analyzing the Pew Research 2019 dataset. For each channel, I used the rates associated with the most common response, as listed in the Pew Survey (variables MAINSOPOL_USE_W57 and NEWS_MOST_W57). Respondents also provided an openended response about what media sources they use, which provided insight into the best channels for placement and guided rate selection.

Note that a campaign with a multiplier of 1 may result in some people seeing the same message more than once (say, for example on cable television), even if they only get their information from one news source.

Nonetheless, a 1x multiplier mimics the number of initial impressions they received on a 1:1 basis, not a 3:1 basis, as I would suggest for counter-attitudinal messages.

attitude change multiplier of 5. As detailed above, in most cases, a multiplier of at least 3 (the medium estimate) would constitute the minimum corrective campaign to run, given the importance of multiple exposures and the likelihood that the audience will receive them and be affected by them. ¹⁷⁴ However, if a prior corrective campaign had been run, some harm would have been mitigated. ¹⁷⁵ I therefore would recommend the lowest damages estimate of \$368,183.78 to \$552,621.56, contingent on a prior campaign having been executed. ¹⁷⁶ Appendix G includes the detailed results of the damages model.

Figure 18. Final Damages Calculations

	Low	Medium	High
High			
Impressions	\$552,621.56	\$1,657,864.69	\$2,763,107.82
Low			
Impressions	\$368,183.78	\$1,104,551.33	\$1,840,918.88

High & low impressions from the Impressions Model Low = 1x attitude change multiplier, Medium = 3x, High = 5x In the campaign, I assume an impression rate of $5\%^{177}$ and a bounce rate of 90%. ¹⁷⁸

The damages model presents a conservative estimate of the cost to run a multi-media campaign to correct attitudes amongst the audience most likely to have been receptive to the

Cacioppo and Petty (1980); Housholder and LaMarre (2014); Weiss (1969).

Note that with the relatively low impression rates used in the impressions and damages analysis (1 to 20%), the likelihood of counting the same person twice is relatively low. However, as a reasonable and conservative step, I use the lowest frequency multiplier to avoid overly-exposing the target audience to the corrective message.

Cacioppo and Petty (1980); Housholder and LaMarre (2014); Weiss (1969).

The CPMs I rely on for Twitter, Facebook, and YouTube influencers are based on an influencer's number of followers or subscribers. For the reasons described above, not all of a user's followers will see an influencer's post. As a result, to ensure the corrective campaign generates sufficient impressions, it is necessary to incorporate an impression rate. In this case, I am relying on an impression rate of 5% which is the median impression rate calculated using Equation 2a from the Impression Model.

The CPM I rely on for web blog influencers is based on site visits. To account for people who visit a blogger's website but do not perform any other action, I multiplied the impressions needed by a bounce rate of 90%, a typically bounce rate for blogs. (https://influencermarketinghub.com/glossary/bounce-rate/).

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Statement (see Appendix H for the reasons why the damages model is conservative). It does not account for the harm to Ms. Carroll's brand in the public at large, but only among this specific receptive audience. The campaign takes into account readership and viewership patterns in the target audience, the number of receptive impressions, and the current advertising costs across media. In this case, the Statement came from Mr. Trump, a high-profile individual with a loyal following whom the media covered, and continues to cover, extensively. Given his status, Mr. Trump's Statement received a very large number of impressions. Of the large audience where this Statement appeared, at least 21% were receptive to them. This audience continues to circulate Mr. Trump's claim, which continues to harm Carroll's person brand and impede attempts to counter-act the damage. The repeated nature of the claims in the public sphere only serves to reinforce and strengthen negative associations put forward by Mr. Trump and keep these associations top of mind for the public. Further, the claim does not go away. It is archived on the internet and therefore remains easily accessible in the public sphere.

VII. CONCLUSION

I conclude that Mr. Trump's Statement about Ms. Carroll has significantly harmed her person brand. My conclusion is based on my academic research and expertise, and my analysis of the facts of this case and of data I collected regarding the dissemination of, and receptivity to, Mr. Trump's Statement; it is also supported by abundant qualitative evidence. The models I developed demonstrate how Mr. Trump's Statement spread to a receptive audience across online and traditional media platforms and provide the basis for calculating the cost of an effort to repair the damage done to Ms. Carroll's person brand. My conclusions are as follows:

• <u>Impressions Model Conclusion</u>: Mr. Trump's Statement made on October 12, 2022, received between 13,787,119 and 18,020,819 impressions across social, digital, television,

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and print media. The extraordinary dissemination of the Statement is in keeping with the high profile and ongoing media coverage of Mr. Trump. This number of impressions is a conservative estimate for reasons I have previously delineated.

- Impact Model Conclusion: Of the impressions generated, an average of 21.42% of recipients for each publication were receptive to this Statement, resulting in between 3,764,125 to 5,649,724 impressions that should be corrected. Further, my qualitative assessment of the impact of the dissemination of Mr. Trump's Statement is that they caused short- and long-term harm to Ms. Carroll beyond the estimate of receptive impressions calculated in my Impact Model. This harm builds upon the initial effects of Statements caused by Mr. Trump's in June 2019 statements in the sense that it strengthens negative associations with Ms. Carroll's brand and provides further, archived content of these negative associations in the public sphere.
- <u>Damages Model Conclusion</u>: The cost to counteract the impact of this Statement is between \$368,183.78 and \$2,763,107.82. I believe the appropriate corrective campaign to repair reputational damage would be the low range, from \$368,183.78 to \$552,621.56 for reasons outlined above. Because I took a conservative approach to calculating the Impressions input, this range represents a conservative estimate.

I reserve the right to revisit and supplement this analysis and amend these conclusions should additional information and/or documents become available. I further reserve the right to respond to opinions and issues raised by any opposing experts. Finally, I reserve the right to use demonstrative and/or other exhibits to present the opinions expressed in this report and/or any supplemental, amended, and/or rebuttal reports.

Dated: January 9, 2023

Professor Ashlee Humphreys

achlee Thumphreys

APPENDIX A. PROFESSOR HUMPHREYS' CV AND PRIOR TESTIMONY

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EDUCATION

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EMPLOYMENT

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Professor, September 2022 to present

Associate Professor, September 2015 to 2022

Assistant Professor, September 2008 to 2015

Kellogg School of Management, Joint Appointment

Professor, September 2022 to present

Associate Professor, January 2019 to 2022

BOOK

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EXPERT WITNESS

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February 2021

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January 2021

Class vs. Bosch LCC, Bosch GmBH and General Motors, No. 2:17-cv-11661-CGS-APP, District Court of Eastern Michigan (Marketing), testifying expert

November 2022

Joe Feehan, Luna Aziz, and Legendairy Milk, LLC vs. Kyrstal Duhaney and Milky Mama, LLC, No. 1:19-CV-01169-RP, District Court for the Western District of Texas, Austin Division (Defamation)

Ongoing

E Jean Carroll vs. Donald J. Trump (in his personal capacity), No. Case No. 20-CV-7311, District Court for the Southern District of New York (Defamation)

CONTRIBUTION STATEMENT

My research concerns <u>how institutions shape consumer norms, values, and practices.</u> My contributions to consumer behavior come from using institutional theory and the method of automated text analysis to investigate market emergence. In "Semiotic Structure and the Legitimation of Consumption Practices: The Case of Casino Gambling," (*Journal of Consumer Research*, 2010), I investigate the cultural process by consumption practices are legitimated over time. Through text analysis of newspaper reporting, I show that a gradual change in the language used to discuss casino gambling paved the way for market emergence. This work won the Sidney J. Levy award for outstanding work in CCT in 2010. In "Megamarketing: Market Creation as a Social Process," published in the *Journal of Marketing* (2010), I complement this approach by applying these insights to understand megamarketing. This research was published as the lead article in the *Journal of Marketing* and was runner-up for the Harold H. Maynard Award for best article of the year.

With Kathy LaTour, I extend this understanding to individual cognitive structures to understand how media framing shapes perceptions of legitimacy on an implicit, individual level (Humphreys and LaTour 2013). In "Branding Disaster: Reestablishing Trust through the Ideological Containment of Systemic Risk Anxieties," with Craig Thompson, we show how this process contains consumer anxieties about risk following a crisis, in a comparative analysis of the Exxon vs. BP oil spills (Humphreys and Thompson 2014) that innovates by adding visual

content analysis. This article was selected as lead article in the *Journal of Consumer Research*. My current work continues to investigate market emergence and change, but has expanded include the areas of social media and sustainability. I also continue to be a leader in the method of automated text analysis in consumer research by publishing and leading workshops and seminars for scholars in both consumer psychology and CCT.

BOOK CHAPTERS

- Carpenter, Greg and Ashlee Humphreys (forthcoming), "If it's Famous, It Must Be Good; The Social Construction of Brand Value in the US Wine Market," *Routledge Handbook of Wine and Culture*, ed. Jennifer Smith-Maguire.
- Humphreys, Ashlee (2019), "Consumer Behavior and E-Commerce," Handbook for Marketing Strategy, ed. Bodo Schlegelmilch and Russell Winer.
- Humphreys Ashlee. (2019) "Automated Text Analysis" In *Handbook of Market Research*. Homburg C., Klarmann M., Vomberg A. (eds). New York, NY: Springer.
- Humphreys, Ashlee (2017), "Social Media," Routledge Handbook of Consumer Behavior, Tina Lowrey and Michael Solomon eds.: London: Routledge.
- Humphreys, Ashlee (2010), "Co-Producing Experiences," in *Medill on Media Engagement*, Edward Malthouse and Abe Peck, eds. New York: Pine Forge Press.
- Humphreys, Ashlee (2009), "Stacking the Deck: Gambling in Film and the Legitimation of Casino Gambling," in *Explorations in Consumer Culture Theory*, John F. Sherry and Eileen Fischer, eds. New York: Routledge.

OTHER PUBLICATIONS

- Carpenter, Gregory and Ashlee Humphreys, "What the Wine Industry Understands About Connecting with Consumers," *Harvard Business Review*, March 3, 2019, https://hbr.org/2019/03/what-the-u-s-wine-industry-understands-about-connecting-with-customers.
- Humphreys, Ashlee and Mathew S. Isaac, "The Development of a Digital Satisfaction Scale (DSS) and Index (DSI) to Evaluate Consumers' Satisfaction with Their Online Experiences," Chicago, IL: Intent Lab. Available at: http://www.performics.com/about/digital-satisfaction-index/.
- Foerstner, Abigail, Ashlee Humphreys, and Ellen Shearer (2013), "Energizing Media Coverage of Energy Issues: The Impact of Different Reporting Frames on Audience Engagement and Understanding," Washington, DC: Lounsbery Foundation.

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CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

- Humphreys, Ashlee (2012), "Megamarketing" in *Encyclopedia of Management*, Volume 9, Marketing, New York: Wiley.
- Humphreys, Ashlee (2010), "Advertising," in *World Book Encyclopedia*. Chicago, IL: World Book.

WORKS IN PROGRESS

- "Shifting the Shape: Strategic Shaping and the Symbolic Management of Risk," with Matteo Corciolani, Elisa Giuliani, Ashlee Humphreys, Dalli Daniele, and Annamaria Tuan (submitted the *Academy of Management Journal*)
- Humphreys, Ashlee with Andrew Smith, "Professional Contests and the Institutionalization of Social Media" (2nd Round, *Journal of Marketing*)
- Humphreys, Ashlee, "The Access/Ownership Distinction in Everyday Consumption Practices," (draft available).
- Humphreys, Ashlee, "Do Brands Like Us? The Perceived Liking of the Brand for the Self and Brand Attraction" with Lora Harding (manuscript in preparation).
- Humphreys, Ashlee and Mathew S Isaac, "Digital Satisfaction," (draft available).

REFEREED PROCEEDINGS

- Huff, Aimee, Ashlee Humphreys and Sarah Wilner, (2018) "Markets and Meaning: The Role of Product Form in Legitimacy, the case of Marijuana," Advances in Consumer Research, Vol. 43.
- Giuliani, Elisa, A Humphreys, D Dalli, A Tuan, M Corciolani (2018), "Strategic CSR Framing by Firms in Emerging Markets," *Academy of Management Proceedings* 2018 (1), 15922
- Humphreys, Ashlee and Kathy LaTour (2011), "Together We Stand, Divided We Fall: Categorization and the Process of Legitimation," *Advances in Consumer Research*, Vol. 39, 172-176.
- Harding, Lora and Ashlee Humphreys (2010), "Self-Brand Attraction: An Interpersonal Attraction Approach to Brand Relationships," *Advances in Consumer Research*, Vol. 37, 68-69.
- Humphreys, Ashlee and Robert V. Kozinets (2009), "The Construction of Value in Attention Economies," *Advances in Consumer Research*, Vol. 36, 689.
- Humphreys, Ashlee (2009), "Legitimation and Semiotic Structure," *Advances in Consumer Research*, Vol. 36, 135-138.

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

- Mick, David Glen and Ashlee Humphreys (2008), "Consumer Freedom from Consumer Culture Theory Perspectives," *Advances in Consumer Research North American Conference Proceedings*, Vol. 35, 18-19.
- Humphreys, Ashlee (2008), "Understanding Collaboration and Collective Production: New Insights on Consumer Co-Production," *Advances in Consumer Research*, Vol. 35, 63-66.
- Humphreys, Ashlee and Markus Giesler (2007), "Access Versus Ownership in Consumer Research," *Advances in Consumer Research*, Vol. 34, 696-698.

ACADEMIC CONFERENCE PRESENTATIONS

- "Markets and Meaning: The Role of Product Form in Legitimacy, the case of Marijuana," Austin, TX. October 2018.
- "The Politicization of Objects," Consumer Culture Theory Conference, Odense, Denmark, July 2018.
- "Professional Contests and the Institutionalization of Social Media," Baltimore, MD, October 2014
- "Wine Worlds," European Marketing Association Conference, Istanbul, Turkey, July 2013.
- "Sustainability and Social Class," European Association of Consumer Research, Barcelona, Spain, June 2013.
- "Oil Spills as Disaster Myths: Grotesque Realism in Postmodern Consumer Culture," Consumer Culture Theory Conference, Oxford University, August 2012.
- "Consumer Culture Theory in Marketing Research," American Marketing Association Winter Educator's Conference, Las Vegas, NV, February 2011.
- "The Discursive Life of Environmentalism," Consumer Culture Theory Conference, Evanston, IL, August 2011.
- "Together We Stand, Divided We Fall: Categorization and the Process of Legitimation," Association for Consumer Research, St. Louis, MO, October 2010.
- "Legitimacy and the Cultural Diffusion of Casino Gambling, 1976-2006," Association for Consumer Research, San Francisco, CA, October 2008.
- "Attention Economies and the Construction of Value: The Case of YouTube," with Robert V. Kozinets, Association for Consumer Research, San Francisco, CA, October 2008.

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CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

- "Attention Economies and the Construction of Value: The Case of YouTube," with Robert V. Kozinets, International Communication Association, Montreal, Quebec, May 2008.
- "Consumer Freedom from Consumer Culture Theory Perspectives," with David Mick, Association for Consumer Research, Memphis, TN, October 2007.
- "Managing Co-production: The Case of Wikipedia," with Kent Grayson, Association for Consumer Research, Memphis, TN, October 2007.
- "Philosophy and Consumption: Discussions on Trust and Brands," with Shona Bettany, Susan Dobscha, Marcus Giesler, Kent Grayson, Ashlee Humphreys, Krittinee Nuttavuthisit, Rob Kleine, Jonathan Schroeder, Alladi Venkatesh, Clara Gustafsson, Association for Consumer Research, Memphis, TN, October 2007.
- "Stacking the Deck: Gambling in Film and the Legitimization of Casino Gambling," Consumer Culture Theory Conference, Toronto, ON, May 2007.
- "The Access/Ownership Distinction in the Media Marketplace," with Markus Giesler, Association for Consumer Research, Orlando, FL, October 2006.
- "The Access/Ownership Distinction in Consumer Behavior," Session Chair, Association for Consumer Research, Orlando, FL, October 2006.
- "Commodity Fission," Circulations Conference, York University, March 2005.

INVITED TALKS

- "Automated Text Analysis," 11th Triennial Invitational Choice Symposium, Cambridge, MD, May 2019.
- "The Politicization of Objects," Pontifical Catholic University of Chile, April 2019.
- "The Politicization of Objects," Guelph University, Guelph, ON, March 2019.
- "Automated Text Analysis and Social Media," University of Manitoba, February 2019.
- "The Emergence of Social Media as a Professional Field," MORS, Kellogg School of Management, September 2018, Northwestern University.
- "Digital Satisfaction Index (DSI)," Marketing Science Institute Trustees Meeting, November 2016, San Francisco.
- "Levels of Analysis and Matching Theory with Data," Association of Consumer Research

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

- Doctoral Consortium, October 2016, Berlin, Germany.
- "The Discursive Life of Environmentalism...and what it means for Corporate Social Responsibility," University of Wyoming, Laramie, Wyoming, August 2016.
- "Publishing Sociological Research in Marketing," Macromarketing Doctoral Consortium, July 2016, Dublin, Ireland.
- "Professional Contests and the Emergence of Social Media as an Institutional Field," York University, Toronto, Canada, May 2016.
- "The Emergence of Social Media as an Institutional Field," Kern Conference, April 2016, Rochester, NY.
- "Professional Contests and the Emergence of Social Media as an Institutional Field," Concordia University, Montreal, Canada, March 2016.
- "The Emergence of Social Media as an Institutional Field," SKEMA, Lille, France, December 2015.
- "Market Creation as a Social Process," Marketplace Mutations: New Perspectives on Consumer and Firm Behaviors that are Transforming the Market," Wilfred Laurier University, Waterloo, ON, May 2015.
- "Writing the Book on Social Media: The Legitimation of Social Media as a Professional Field," 3rd Annual Digital Marketing Conference, Jinan University, Guangzhou, China, May 2015.
- "Writing the Book on Social Media: The Legitimation of Social Media as a Professional Field," HEC Paris Marketing Camp, Paris, France, April 2015.
- Automated Content Analysis in Marketing Research, Association of Consumer Research, Baltimore, MA, October 2014.
- Consumption and Markets Workshop, "Oil Spills as Disaster Myths," University of California, Irvine, Irvine, CA, March 2014.
- Qualitative Data Analysis Workshop, "Macro Approaches to Data Collection," Tucson, AZ, June 2013.
- Kellogg Attitudes Motivation Processes Group (KAMP), "Framing the Game," Kellogg School of Management, Evanston, IL, April 2013.
- Thought Leaders in Services Management, "Consumer Perceptions of Service Constellations: Implications for Service Innovation," Nijmegen, Netherlands, June 2012.

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

Chicago Consumer Culture Community (C4), "Sustainability and Social Class," Chicago, IL, April 2012.

University of Arizona, "Wine Worlds," Tucson, Arizona, March 2012.

Association of Health Care Journalists, "Journalism and Social Media," Chicago, IL, September 2012.

University of Innsbruck, "Access as a Consumer Institution and Orientation," Innsbruck, Austria, May 2011.

Rochester Institute of Technology, "The Discursive Life of Environmentalism," Rochester, NY, April 2011.

University of Wisconsin, "The Discursive Life of Environmentalism," Madison, WI, March, 2011.

Queen's University, "Left out of the Green Revolution? Sustainability and Social Class in the United States," Kingston, Ontario, September 2010.

Chicago Consumer Culture Community (C4), "Words, Words, Words: The Use of Automated Content Analysis in Consumer Research," October 2009

Medill Board of Advisors Meeting, "Chip-less Cookies and Cream-less Oreos: Applying Attitudes Research to Understand Audience Interest," Evanston, IL. October 2009.

American Bar Association, "Social Networking 101," Chicago, IL. March, 2009.

TEACHING

KSM 461 Critical Thinking in Social, Digital, and Mobile Media (MBA), 2020-Present

IMC 466 Social Media (Master's Level), 2014-Present

IMC 401 Marketing Research (Master's Level), 2018

IMC 400 Consumer Insight (Master's Level), 2016

IMC 300/301 Consumer Insight, 2008-2018

IMC 466 Global Perspectives, 2012-2016

IMC 440 Summer Residency Projects, 2008-Present

IMC 455 Online Consumer Insight, Winter 2013

IMC 455 Consumer Insight (Master's Level), Fall 2014

ADVISING

Russel Nelson, University of Irvine, 2015 (Committee Member) Lez Trujillo Torres, University of Illinois Chicago (Committee Member) Alex Mitchell, Queens University (External Committee Member)

SERVICE

Service to the Field

Journal of Consumer Research, ERB

Associate Editor, 2016-2018, 2020-Present

Editorial Board, 2008-present

Journal of Marketing, ERB

Associate Editor, 2020-Present

Editorial Board, 2018-Present

Reviewer. 2010-Present

Journal of Marketing Research

Associate Editor (ad hoc), 2020-Present

Reviewer, 2016-Present

Journal of Business Research

Guest Editor, Fall 2019

AMS Review, ERB

Editorial Board, 2019-Present.

Journal of Interactive Marketing, ERB

Editorial Board, 2018-Present

Journal of Consumer Culture, Reviewer

2009-Present

Consumption, Markets, and Culture

Editorial Review Board 2010-Present

Reviewer 2008-Present

Marketing Theory, Reviewer

2007-2009

Sociological Forum, Reviewer

2010

American Behavioral Scientist, Reviewer

2010-Present

Association for Consumer Research Conference

Reviewer 2008-2010

Program Committee 2011-Present

Special Session Curator, 2013

European Science Foundation, Grant Reviewer

2010, 2012

Chicago Consumer Culture Community, Organizer

2010-Present

Consumer Culture Theory Conference, Program Committee

Reviewer 2008-2010

Program Committee 2011-2013

Dissertation Committee Member, Russell Nelson, "Competitive Dynamics in New Markets: Measuring Innovation, Successful Strategies, and the Role of Social Media," University of Irvine, September 2013.

Dissertation Committee Member, Lez Trujllo Torres, University of Illinois, Chicago, May 2019

Dissertation Committee Member, Alex Mitchell, Queens University, June 2018

Service to Northwestern

Chapin Fellow, Chapin Humanities Residential College 2012-2017 Senior Thesis Advisor Stanley Polit, School of Education and Social Policy, 2010 Ashley Heyer, School of Education and Social Policy, 2010

Service to Medill

MSIMC Curriculum Committee 2008-Present Strategic Planning Committee 2019 Committee to Evaluate Procedures for Promotion 2019 MSJ Curriculum Committee 2008-2011 IMC Undergraduate Curriculum Committee 2008-2012 IMC Faculty Search Committee 2000-2010 Digital Magazine Search Committee 2011-2012 Medill Matters Co-Editor 2010-2012

SHORT BIO

Ashlee Humphreys is Associate Professor at the Medill School of Journalism, Media, and Integrated Marketing Communications, Northwestern University. Her research uses a sociological perspective to examine core topics in marketing management and consumer behavior and has been published in *Journal of Marketing*, *Journal of Consumer Research*, *Journal of Marketing Research* and *Sociology Compass*. Professor Humphreys has been elected both an MSI Scholar (2020) and MSI Young Scholar (2015) and has won the Sidney J. Levy award for best research from a dissertation in CCT. She received her PhD in Marketing from Kellogg School of Management at Northwestern University in 2008. Her current research interests include the role of institutions in markets, processes of co-production, and the development of online communities, and she serves as an Associate Editor at the *Journal of Marketing* and the *Journal of Consumer Research*.

MEMBERSHIPS

Association for Consumer Research American Marketing Association American Sociological Association

HONORS AND AWARDS

MSI Scholar, 2020

MSI Young Scholar, 2015

ASG Faculty Honor Roll, Northwestern University, Evanston, IL, 2012.

Harold H. Maynard Award, Runner-up, *Journal of Marketing*, American Marketing Association, 2010.

Sidney J. Levy Award, Consumer Culture Theory Conference, 2010.

PRESS COVERAGE

"Winemakers Tell Us What We Want," *The Australian*, April 16, 2019.

"It Takes Status To Succeed In The U.S. Wine Business, Says Two Academic Researchers," Thomas Pellechia, *Forbes*, March 9, 2019. https://www.forbes.com/sites/thomaspellechia/2019/03/09/it-takes-status-to-succeed-in-the-u-s-wine-business-says-two-academic-researchers/.

"A Retail Dilemma: Consumers Believe In Pictures As Digital Trust Declines," Laura Heller, *Forbes*, 21, 2019. https://www.forbes.com/sites/lauraheller/2019/02/21/a-retail-dilemma-consumers-believe-in-pictures-as-digital-trust-declines.

"How What You Say Reveals More Than You Think," *Knowledge@Wharton*, February 16, 2018. https://knowledge.wharton.upenn.edu/article/say-reveals-think/.

"Contractor BP Wants You to Think the Gulf Is OK," Jason Plautz, *National Journal*, April 20, 2015.

"Media coverage creates oil spill amnesia — so don't read this!," *Grist*, http://grist.org/list/media-coverage-creates-oil-spill-amnesia-so-dont-read-this/

"Place Your Bets," Merrill Perlman, Columbia Journalism Review, September 30, 2013.

CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER

"Gaming versus Gambling," Michael Finney, Consumer Talk, KGO 810, Saturday 21, 2013.

"Why are consumers more likely to participate in online gaming than gambling?" *e! Science News*, September 10, 2013.

"Medill Energy Report Sparks Debate," Mike Smith, Huffington Post, April 29, 2013. "Chicago Chapter Learns about Social media for Working Journalists," Pia Christensen, *Health Journalism*, Association of Health Care Journalists, September 27, 2012.

APPENDIX B. MATERIALS CONSIDERED

Bates Stamped Documents

- CARROLL 024475-79
- CARROLL 024499
- CARROLL 024554
- CARROLL 024559
- CARROLL 024562
- CARROLL 024640-41
- CARROLL 024684
- CARROLL 024796
- CARROLL 024944
- CARROLL 024974
- CARROLL 025080
- CARROLL 026326
- CARROLL_026329
- CARROLL_026331
- CARROLL 026473
- CARROLL 026479
- CARROLL 026596
- CARROLL 028058-59
- CARROLL 028063-65
- CARROLL 028069
- CARROLL 028115
- CARROLL 028549
- CARROLL 028588
- CARROLL 028592
- CARROLL 029331
- CARROLL 029774-75
- CARROLL 030105-08
- CARROLL 030111-29
- CARROLL 030131-48
- CARROLL 030150-56

Legal Filings and Depositions

- Complaint, November 4, 2019.
- Complaint, November 17, 2022.
- Deposition of Robbie Myers, October 12, 2012.

Academic Articles

- Ajzen, I. (1985), "From intentions to actions: A theory of planned behavior," In J. Kuhl & J. Beckmann (Eds.), Action control: From cognition to behavior. Berlin, Heidelberg, New York: Springer-Verlag. (pp. 11-39).
- Albarracin, D., & Shavitt, S. (2018), Attitudes and attitude change. Annual Review of Psychology, 69, 299-327.
- Ardia, D. S. (2010), Reputation in a Networked World: Revisiting the Social Foundations of Defamation Law. Harvard Civil Rights-Civil Liberties Law Review, 45(2), 261-328, p. 264.
- Bakker, Tom, Damian Trilling, Claes de Vreese, Luzia Helfer, and Klaus Schönbach (2013), "The Context of Content: The Impact of Source and Setting on the Credibility of News," Recherches en Communication, 40, 151-68.
- Brooks, Gillian, Jenna Drenten, and Mikolaj Jan Piskorski (2021), "Influencer Celebrification: "How Social Media Influencers Acquire Celebrity Capital," Journal of Advertising, 50 (5), 528-47.
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- Housholder and LaMarre (2014), Facebook Politics: Toward a Process Model for Achieving Political Source Credibility Through Social Media, Journal of Information Technology & Politics, 11:368-382.
- Huang, J., et al. (2021), "Large-scale quantitative evidence of media impact on public opinion toward China," Humanities and Social Sciences Communications, 8(1): 1-8.
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Books

- Baym, Nancy K. Personal connections in the digital age. John Wiley & Sons, 2015.
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- Chadwick, Andrew (2017), The Hybrid Media System: Politics and Power: Oxford University Press.
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- David, John (2016), How to Protect (or Destroy) Your Reputation Online: The Essential Guide to Avoid Digital Damage, Lock Down Your Brand, and Defend Your Business: Red Wheel/Weiser.
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- Gans, Herbert J (2004), Deciding What's News: A Study of CBS Evening News, NBC Nightly News, Newsweek, and Time: Northwestern University Press.
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- Reinhard, Beth; Colby Itkowitz. "N.Y. writer says Trump assaulted her in the '90s." The Washington Post; Washington, D.C. [Washington, D.C]. 22 June 2019: A.1.
- Rosenberg, Alyssa. "Trump will never be held accountable for his treatment of women." The Washington Post. 23 June 2019: A.23.
- Wagner, John. "Trump says latest accuser is 'lying." The Washington Post. 25 June 2019: A.3.
- Zaveri, Mihir. "Trump Repeatedly Denies Sexual Assault Claim by an Advice Columnist." New York Times. 23 June 2019: A.23.

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Databases

- Brandwatch, https://www.brandwatch.com/
- Internet Archive TV News, https://archive.org/details/tv
- ProQuest, https://www.proquest.com/index
- Twitter API, https://developer.twitter.com/en/docs/twitter-api

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APPENDIX C. GLOSSARY OF TERMS

Attitudes: A lasting, generalized evaluation of an object, person, or idea.

Bounce Rate: The percentage of users who leave a page without taking any action.

Cost Per Click (CPC): The cost an advertiser pays each time a user clicks on an advertisement. ¹⁷⁹

Cost Per Mille (CPM): The cost an advertiser pays per one thousand impressions generated by an advertisement on a web page. ¹⁸⁰

Echo Chamber: An environment where a person only encounters information or opinions that reflect and reinforce their own. ¹⁸¹

Engagement: Measures of audience involvement with or responsiveness to a particular message. Can include metrics such as likes, retweets, and comments/replies.

Engagement Rate: The percentage of people who engage with a post. Engagement rate is calculated by dividing the number of impressions by the number of engagements.

Filter Bubble: An environment isolated by algorithms that prevent users from being exposed to information and perspectives they haven't already expressed an interest in. ¹⁸²

Followers: The total number of users who could potentially see another user's post.

Impressions: The total number of times a post or other piece of content has been displayed to users. ¹⁸³

Impression Rate: The percentage of a user's followers who are exposed to a post. Impression rates are unique to each account and are not publicly available. Nonetheless, academic researchers have developed a formula to estimate the impressions rate using follower counts. ¹⁸⁴

Influencers: People with specialized knowledge, authority, or insight into a specific niche or industry that can sway the opinions of a target audience.

Information Cascade: The way information is exchanged on social media networks. After a user posts content to social media, that user's followers observe that behavior and repeat the

https://www.investopedia.com/terms/c/cpm.asp

https://www.investopedia.com/terms/c/cpm.asp

https://edu.gcfglobal.org/en/digital-media-literacy/what-is-an-echo-chamber/1/

https://edu.gcfglobal.org/en/digital-media-literacy/how-filter-bubbles-isolate-you/1/

https://help.twitter.com/en/managing-your-account/using-the-tweet-activity-dashboard

¹⁸⁴ Wang et al., 2016

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same process by reposting or sharing the original user's content. Through sharing and reposting, an unbroken chain of messages is formed with a common, singular origin, that keeps extending until individuals stop spreading or reposting it. 185

Media System: A network of platforms, institutions, practices, and people understood as circulating information, who by interacting with one another, shape each other's opinions. 186

Network: A system of users connected by exchanges of information.

Network Structure: The number of connections (e.g., followers) one user has and the number of connections that user's connections have.

Person Brand: An actively curated image that projects how a person wants the public to view them. The brand image often consists of the person's unique combination of skills, experience, and personality. 187

Ranking Algorithm: The algorithm each social media platform relies on to determine what content to display to each user. 188

Reach: The total number of people who could potentially be exposed to a post or other piece of content.

Retweet Rate: The percentage of a user's followers who retweeted a post. The retweet rate is calculated by dividing the number of retweets by the number of followers.

Social Capital: The quality and quantity of social connections. Social capital can be measured by the number of connections a user has on a social media network. Users with high social capital are able to spread a message broadly and deeply on a network.

Social Media Platform: The websites and applications that focus on communication, community-based input, interaction, content-sharing, and collaboration. Some popular examples of social media platforms include Twitter, Facebook, Reddit, and YouTube.

Source Credibility: The extent to which the persons or entities generating information on social media are perceived to be trustworthy, knowledgeable, and believable. 189

Vosoughi et al., 2018; Singh, N., A. Singh, R. Sharma (2020), Predicting Information Cascade on Twitter Using Random Walk, Procedia Computer Science, 173, 201-209; https://blogs.cornell.edu/info2040/2016/11/16/information-cascade-in-social-media/

¹⁸⁶ https://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-205

https://hbr.org/2022/02/whats-the-point-of-a-personal-brand; https://influencermarketinghub.com/what-ispersonal-branding/

https://sproutsocial.com/insights/social-media-algorithms/

Zha, X. et al (2018). Exploring the effect of social media information quality, source credibility and reputation on informational fit-to-task: Moderating role of focused immersion. Computers in Human Behavior, 79, 227-237.

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Truth Social: An alternative social media platform created by former President Donald J. Trump. The site has Twitter-like features and design, where the users can create profiles, follow other users, and create posts. In the place of "tweets" and "retweets," Truth Social calls its similar functions "Truths" and "re-truths." ¹⁹⁰

Unique Visitors: The total number of unique visits to a given page. Each visitor to the site is counted once during the reporting period. ¹⁹¹

https://www.npr.org/2022/02/22/1082243094/trumps-social-media-app-launches-year-after-twitter-ban.

https://www.semrush.com/kb/975-traffic-analytics-top-landing-pages.

APPENDIX D. <u>IMPRESSIONS MODEL</u> 192

A. Web Impressions Model

No.	Title	Author	Publication Date	Website	Unique Monthly Visitors ¹⁹³	Bounce Rate ¹⁹⁴	Impressions Estimate ¹⁹⁵
W-1	What to Know as Trump Is Deposed in E. Jean Carroll Defamation Suit ¹⁹⁶	Benjamin Weiser	10/19/2022	nytimes.com	94,300,000	64.07%	1,129,400
W-2	Trump deposed at Mar-a- Lago in case brought by sexual assault accuser ¹⁹⁷	Shayna Jacobs	10/19/2022	washingtonpost.com	61,000,000	56.77%	879,010
W-3	Trump responds to E. Jean Carroll defamation lawsuit after judge denies delay: 'a hoax and a lie' ¹⁹⁸	Lawrence Richard	10/13/2022	foxnews.com	41,900,000	33.58%	927,666
W-4	Trump Doubles Down On Undermining Defense Against E. Jean Carroll's Defamation Case ¹⁹⁹	Mary Papenfuss	10/21/2022	huffpost.com	20,100,000	45.15%	367,495
W-5	Trump to be deposed in defamation suit filed by rape accuser ²⁰⁰	The Associated Press	10/19/2022	abcnews.go.com	17,900,000	68.55%	187,652

Please see Appendix D produced in Excel format along with this Report for a more detailed Impressions Model.

¹⁹³ The total number of unique visitors to a given page in October 2022. Data collected from Semrush.

¹⁹⁴ The percentage of users who leave a page without taking any action.

¹⁹⁵ Impressions estimate calculated using the following formula: (Unique Monthly Visitors/30)*(1-bounce rate).

https://www.nytimes.com/2022/10/19/nyregion/trump-e-jean-carroll-lawsuit.html.

https://www.washingtonpost.com/nation/2022/10/19/trump-author-defamation-case/.

https://www.foxnews.com/politics/trump-responds-jean-carroll-defamation-lawsuit-after-judge-denies-delay.

https://www.huffpost.com/entry/trump-undermining-own-defamation-case-e-jean-carroll_n_6351b5f0e4b051268c52af87.

https://abcnews.go.com/US/wireStory/trump-deposed-defamation-suit-filed-rape-accuser-91736202.

No.	Title	Author	Publication Date	Website	Unique Monthly Visitors ¹⁹³	Bounce Rate ¹⁹⁴	Impressions Estimate ¹⁹⁵
W-6	Donald Trump Slams Rape Accuser After Being Ordered to Testify in Defamation Suit ²⁰¹	Virginia Chamlee	10/13/2022	people.com	52,100,000	71.22%	499,813
W-7	Trump Blasts E. Jean Carroll's 'Complete Con Job' Case, Ordered to Testify ²⁰²	Kaitlin Lewis	10/13/2022	newsweek.com	27,200,000	71.14%	261,664
W-8	Trump's latest rant about his rape defamation case could 'blow a hole' in his defense: report - Raw Story - Celebrating 18 Years of Independent Journalism ²⁰³	Tom Boggioni	10/18/2022	rawstory.com	3,300,000	33.98%	72,622
W-9	Trump angrily lashes out after his deposition is ordered ²⁰⁴	The Associated Press	10/13/2022	denverpost.com	3,200,000	60.34%	42,304
W-10	Trump Just Blew Up His Rape Lawsuit Defense ²⁰⁵	Greg Walters	10/18/2022	vice.com	14,500,000	65.22%	168,103
W-11	Former President Donald Trump deposed in E. Jean Carroll rape defamation suit ²⁰⁶	Molly Crane- Newman and Dave Goldiner	10/19/2022	nydailynews.com	7,900,000	60.21%	104,780

https://people.com/politics/donald-trump-slams-rape-accuser-ordered-testify-defamation-trial/.

https://www.newsweek.com/trump-blasts-e-jean-carrolls-complete-con-job-case-ordered-testify-1751392.

https://www.rawstory.com/e-jean-carroll-trump-2658467176/.

 $^{^{204} \}quad https://www.denverpost.com/2022/10/12/trump-angrily-lashes-out-after-his-deposition-is-ordered-2/.$

https://www.vice.com/en/article/z34gej/trump-rape-lawsuit-defense-e-jean-carroll.

https://www.nydailynews.com/news/politics/us-elections-government/ny-trump-deposition-e-jean-carroll-rape-defamation-suit-20221019-a6gqmeu66rgxfp6rtmka7ovmha-story.html.

No.	Title	Author	Publication Date	Website	Unique Monthly Visitors ¹⁹³	Bounce Rate ¹⁹⁴	Impressions Estimate ¹⁹⁵
W-12	Trump Is Reportedly 'Raging' Like A Madman As He Deals With The Legal Ramifications Of The DOJ Documents Case, Rape Accuser E. Jean Carroll, And More ²⁰⁷	Jennifer Wood	10/14/2022	uproxx.com	4,500,000	82.57%	26,145
W-13	Trump angrily lashes out after his deposition is ordered ²⁰⁸	Larry Neumeister and Jill Colvin	10/13/2022	seattletimes.com	4,900,000	57.32%	69,711
W-14	Trump criticizes legal system after his deposition in defamation lawsuit ordered ²⁰⁹	Larry Neumeister and Jill Colvin	10/13/2022	pbs.org	12,200,000	55.50%	180,967
W-15	This Woman Is Not My Type!' Donald Trump Claims He Didn't Assault Accuser E. Jean Carroll After Judge Orders Ex-Prez To Sit For Deposition ²¹⁰	Connor Surmonte	10/14/2022	radaronline.com	5,900,000	69.37%	60,239
W-16	Trump may have destroyed his only real defense in the E. Jean Carroll rape defamation case ²¹¹	Aldous J Pennyfarthing	10/18/2022	dailykos.com	2,300,000	35.26%	49,634

https://uproxx.com/viral/donald-trump-raging-doj-rape-defamation-case/.

http://www.seattletimes.com/nation-world/nation/judge-trump-must-sit-for-deposition-in-defamation-lawsuit/.

https://www.pbs.org/newshour/politics/trump-criticizes-legal-system-after-his-deposition-in-defamation-lawsuit-ordered.

https://radaronline.com/p/donald-trump-responds-accuser-e-jean-carroll-judge-orders-deposition/.

https://www.dailykos.com/story/2022/10/18/2129774/-Trump-may-have-destroyed-his-only-real-defense-in-the-E-Jean-Carroll-rape-defamation-case.

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No.	Title	Author	Publication Date	Website	Unique Monthly Visitors ¹⁹³	Bounce Rate ¹⁹⁴	Impressions Estimate ¹⁹⁵
W-17	Trump melts down on Truth Social after judge blasts his attempt to "run out the clock" ²¹²	Areeba Shah	10/13/2022	salon.com	5,800,000	62.04%	73,389
				TOTAI	L WEB IMPR	ESSIONS	5,100,593

 $^{^{212} \}quad https://www.salon.com/2022/10/13/melts-down-on-truth-social-after-blasts-his-attempt-to-run-out-the-clock/.$

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B. Social Media Impressions Model

No.	Original Tweet ID ²¹³	Article Referenced	Primary Followers 214	Retweets ²¹⁵	Average RT Followers	Total Followers 217	Impression Estimate Equation 2a ²¹⁸ for publishers and Equation 2c ²¹⁹ for typical Twitter users	Impressions Estimate Equation 2b ²²⁰ and Equation 2c ²²¹ for typical Twitter users
S-1	@FoxNews ²²²	W-3	22,480,294	30	689	22,500,975	778,223	3,929,736
S-2	@Newsweek ²²³	W-7	3,589,816	8	3,433	3,617,277	161,197	627,740
S-3	@NYDailyNews ²²⁴	W-11	823,625	9	133,190	2,022,338	98,992	154,446
S-4	@RonFilipkowski ²²⁵	Truth Social Statement Capture	532,316	441	5,229	2,838,180	185,813	113,202

²¹³ Twitter's unique identifier for the original tweet.

Number of followers of original tweet.

Total number of retweets (and quote tweets) to the original tweet.

Estimated average number of followers of all retweets. Estimate is based on retweets accessible via the Twitter API.

²¹⁷ (Average RT Followers * Retweets) + Primary Followers.

Equation 2a: 10^(0.7396 log(Total Followers*(1-bot rate)) + 0.0473 log(Primary Followers*(1-bot rate)) + 0.1027 log(Retweets)). Where: "Bot rate" is an estimate rate of bot activity on Twitter. I'm estimating a 12.6% bot rate.

Equation 2c: followers_{first-level}*.01*(1-bot rate)+retweets*followers_{second-level}*.01*(1-bot rate). Where: "Bot rate" is an estimate rate of bot activity on Twitter. I'm estimating a 12.6% bot rate.

Equation 2b: (primary followers * First Level Impression Rate * (1-bot rate of 12.6%)) + (Retweets * Second Level Impression Rate * (1-bot rate)). Where: "First Level Impression Rate" is an estimated impression rate for the original tweet. I'm estimating a 20% First Level Impression Rate. "Second Level Impression Rate" an estimated impression rate for the retweets of the original tweet. I'm estimating a 1% Second Level Impression Rate.

Equation 2c: followers_{first-level}*.01*(1-bot rate)+retweets*followers_{second-level}*.01*(1-bot rate). "Bot rate" is an estimate rate of bot activity on Twitter. I'm estimating a 12.6% bot rate.

²²² https://twitter.com/FoxNews/status/1580428136285552640.

²²³ https://twitter.com/Newsweek/status/1580549579514122243.

²²⁴ https://twitter.com/NYDailyNews/status/1582788494199468032.

https://twitter.com/RonFilipkowski/status/1580384386872406017.

No.	Original Tweet ID ²¹³	Article Referenced	Primary Followers ²¹⁴	Retweets ²¹⁵	Average RT Followers	Total Followers 217	Impression Estimate Equation 2a ²¹⁸ for publishers and Equation 2c ²¹⁹ for typical Twitter users	Impressions Estimate Equation 2b ²²⁰ and Equation 2c ²²¹ for typical Twitter users
S-5	@theanthonydavis ²²⁶	Truth Social Statement Capture	16,828	24	1,450	51,618	451	451
S-6	@DianaCialino ²²⁷	Truth Social Statement Capture	13,413	3	4,688	27,477	240	240
S-7	@jruss_jruss ²²⁸	Truth Social Statement Capture	7,788	17	5,988	109,582	958	958
S-8	@eelarson ²²⁹	Truth Social Statement Capture	4,700	1	41	4,741	41	41
S-9	@Proudmimi12 ²³⁰	Truth Social Statement Capture	3,988	3	19,488	62,451	546	546
S-10	@TheResisterHQ ²³¹	Truth Social Statement Capture	1,305	1	7,594	8,899	78	78
S-11	@SheilaGOP ²³²	Truth Social	1,011	0	0	1,011	9	9

 $^{^{226} \}quad https://twitter.com/theanthonydavis/status/1580431838408949760.$

https://twitter.com/DianaCialino/status/1580726073700257793.

https://twitter.com/jruss_jruss/status/1582751261362835456.

²²⁹ https://twitter.com/eelarson/status/1580399047654850561.

²³⁰ https://twitter.com/Proudmimi12/status/1580636265065897984.

https://twitter.com/TheResisterHQ/status/1580581533785919489.

²³² https://twitter.com/SheilaGOP/status/1580341410267418624.

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No.	Original Tweet ID ²¹³	Article Referenced	Primary Followers ²¹⁴	Retweets ²¹⁵	Average RT Followers	Total Followers ²¹⁷	Impression Estimate Equation 2a ²¹⁸ for publishers and Equation 2c ²¹⁹ for typical Twitter users	Impressions Estimate Equation 2b ²²⁰ and Equation 2c ²²¹ for typical Twitter users
		Statement Capture						
S-12	@pattyeludwig ²³³	Truth Social Statement Capture	572	24	2,312	56,053	490	490
S-13	@crazyhogposts ²³⁴	Truth Social Statement Capture	196	2	14,109	28,414	248	248
		TO	TAL SOCIAL	MEDIA IMP	RESSIONS (I	LOW/HIGH)	1,227,286	4,828,186

				20% Impression
Truth Social URL	Truth Social Account	Date	6% Impression Rate	Rate
https://truthsocial.com/@realDonaldTr ump/posts/109158644496040450	@realDonaldTrump	Oct 12, 2022, 21:38	271,200	904,000

https://twitter.com/pattyeludwig/status/1580407740413145089.

https://twitter.com/crazyhogposts/status/1580617213236899840.

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C. TV Impressions Model

No.	Title	Date	Time	Network	Ratings Estimate				
T-1	All In With Chris Hayes ²³⁵	October 20, 2022	12:00am-1:00am PDT	MSNBC	$1,305,000^{236}$				
T-2	Chris Jansing Reports ²³⁷	October 19, 2022	10:00am-11:00am PDT	MSNBC	$664,000^{238}$				
T-3	The Reid Out ²³⁹	October 19, 2022	4:00pm-5:00pm PDT	MSNBC	$1,284,000^{240}$				
T-4	Deadline White House ²⁴¹	October 19, 2022	1:00pm-3:00pm PDT	MSNBC	$1,353,000^{242}$				
T-5	Special Report With Bret Baier ²⁴³	October 19, 2022	3:00pm-4:00pm PDT	FOX News	$2,423,000^{244}$				
	TOTAL TV IMPRESSIONS ESTIMATE								

D. Print Impressions Model

No.	Article Title	Publication	Date	Circulation
P-1	Trump deposed in defamation case brought by accuser	Washington Post	10/20/22	$159,040^{245}$
		TOTAL PRINT IN	MPRESSIONS	159,040

https://archive.org/details/MSNBCW 20221020 070000 All In With Chris Hayes/.

https://ustvdb.com/networks/msnbc/shows/all-in-chris-hayes/.

https://archive.org/details/MSNBCW 20221019 170000 Chris Jansing Reports/.

https://ustvdb.com/networks/msnbc/shows/chris-jansing-reports/.

https://archive.org/details/MSNBCW_20221019_230000_The_ReidOut/.

https://ustvdb.com/networks/msnbc/shows/reidout/.

²⁴¹ https://archive.org/details/MSNBCW_20221019_200000_Deadline_White_House/.

https://ustvdb.com/networks/msnbc/shows/deadline-white-house/.

https://archive.org/details/FOXNEWSW 20221019 220000 Special Report With Bret Baier/.

https://ustvdb.com/networks/fox-news/shows/special-report-bret-baier/.

Audited Report for Washington Post (6 months ended March 31, 2022), Alliance for Audited Media.

APPENDIX E. ADDITIONAL EXAMPLES OF NEGATIVE COMMENTS



Rogelio Rodriguez

@Rogelio06290905

Replying to @KinojaMaswali and @NYDailyNews

This happened because he has money. That's it.

2:06 PM · Oct 19, 2022

https://twitter.com/Rogelio06290905/status/1582795434963398659



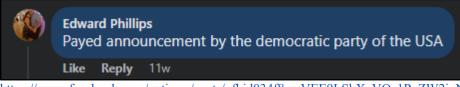
Ezekiel @Ezekill58

Replying to @NYDailyNews

Where the f was troll hiding at in the first place. Another bullshytter going after Trump

6:30 PM · Oct 19, 2022

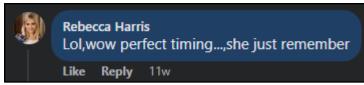
https://twitter.com/Ezekill58/status/1582861665942765568



 $\underline{https://www.facebook.com/nytimes/posts/pfbid034f8wyVEE9LSkXgVQe1PqZW2jgNN12EpsouZWRuhqUtQpHExUiAZRM9NNVWpewT9G1?comment_id=12445725425912143}$



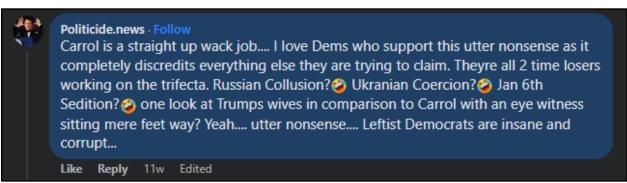
 $\underline{https://www.facebook.com/nytimes/posts/pfbid034f8wyVEE9LSkXgVQe1PqZW2jgNN12EpsouZWRuhqUtQpHExUiAZRM9NNVWpewT9G1?comment_id=684777239880671$



 $\underline{\text{https://www.facebook.com/nytimes/posts/pfbid034f8wyVEE9LSkXgVQe1PqZW2jgNN12EpsouZWRuhqUtQpHExUiAZRM9NNVWpewT9G1?comment_id=8}\\08130077177650$



https://www.facebook.com/nytimes/posts/pfbid034f8wyVEE9LSkXgVQe1PqZW2jgNN12EpsouZWRuhqUtQpHExUiAZRM9NNVWpewT9G1?comment_id=765007754597388



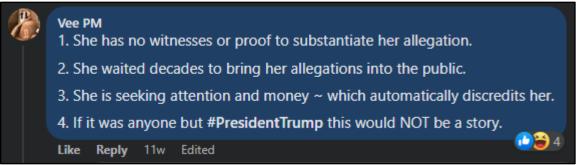
https://www.facebook.com/nytimes/posts/pfbid034f8wyVEE9LSkXgVQe1PqZW2jgNN12EpsouZWRuhqUtQpHExUiAZRM9NNVWpewT9Gl?comment_id=1 325149061589817



https://www.facebook.com/nytimes/posts/pfbid034f8wyVEE9LSkXgVQe1PqZW2jgNN12EpsouZWRuhqUtQpHExUiAZRM9NNVWpewT9G1?comment_id=4 24879179805438



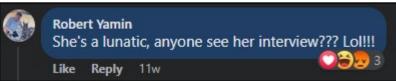
 $\underline{https://www.facebook.com/nytimes/posts/pfbid034f8wyVEE9LSkXgVQe1PqZW2jgNN12EpsouZWRuhqUtQpHExUiAZRM9NNVWpewT9G1?comment_id=1}{292196594866803}$



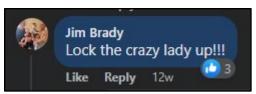
 $\underline{https://www.facebook.com/nytimes/posts/pfbid034f8wyVEE9LSkXgVQe1PqZW2jgNN12EpsouZWRuhqUtQpHExUiAZRM9NNVWpewT9Gl?comment_id=607390521082489$



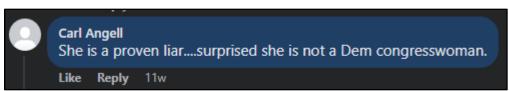
 $\underline{https://www.facebook.com/washingtonpost/posts/pfbid0u4Gy656TyvBCPzgWAEjKHgLSPCGPPUe1YZXtpvDFjJL8VFpMC7Yy3gbhiBP6mHAWl?comment_id=788512402232831}$



https://www.facebook.com/washingtonpost/posts/pfbid0u4Gy656TyvBCPzgWAEjKHgLSPCGPPUe1YZXtpvDFjJL8VFpMC7Yy3gbhiBP6mHAWl?comment id=873190444032237



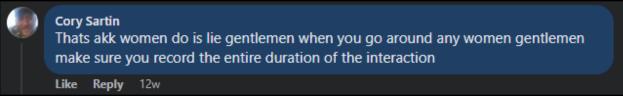
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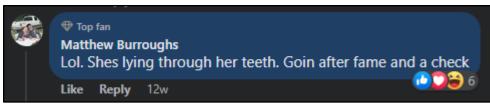
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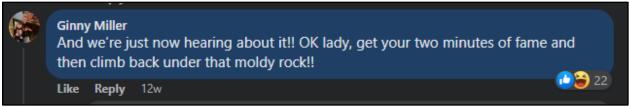
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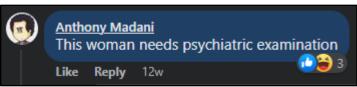
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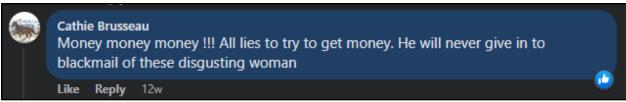


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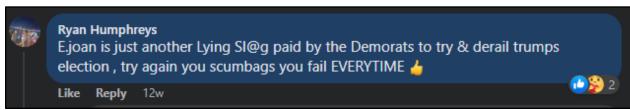


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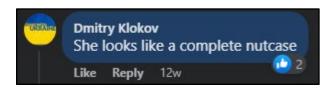
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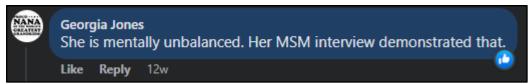
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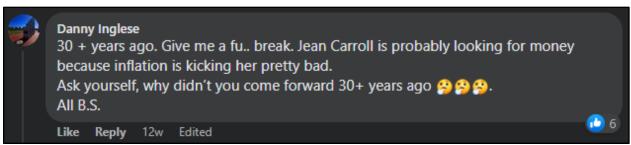
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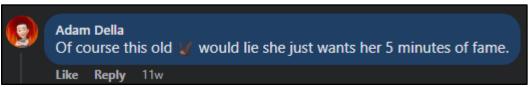
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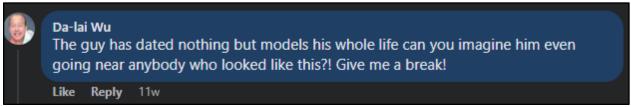
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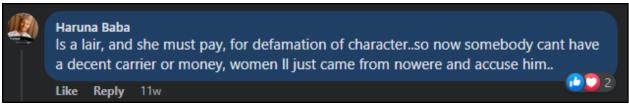
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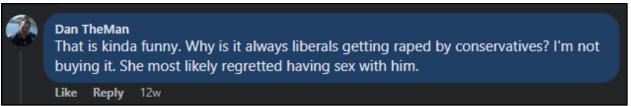
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https://www.facebook.com/NYDailyNews/posts/pfbid02YEdXSDcgKHJWGP14689nq8gzTLyuxa3pdBK73idbr896R6pdrwX4b63aSVVy4jeA1?comment_id=419819773676496



 $\underline{https://www.facebook.com/NYDailyNews/posts/pfbid02YEdXSDcgKHJWGP14689nq8gzTLyuxa3pdBK73idbr896R6pdrwX4b63aSVVy4jeAl?comment_id=5}\\10978057263762$

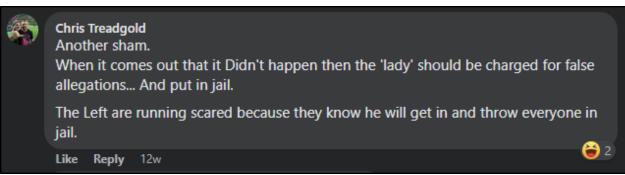


https://www.facebook.com/seattletimes/posts/pfbid038CLuhY1rPeEzr1DRDwmjA95mEsUAHySyGNK4AyU559pkGA2FFdG86RV5aRU1FbRYl?comment_id =615742326895534

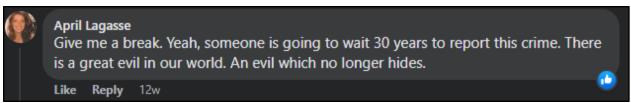


https://www.facebook.com/seattletimes/posts/pfbid038CLuhY1rPeEzr1DRDwmjA95mEsUAHySyGNK4AyU559pkGA2FFdG86RV5aRU1FbRY1?comment_id = 3426667230945090

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https://www.facebook.com/newshour/posts/pfbid0YPUeureawmwtL6zz3yXV1rG8AAWPyfAsL2K9vPLLJGP4tSHMzWZSgKac5BYd8J8sl?comment_id=803556720944408



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Replying to @TwoSides1Truth @Gigi69030829 and 43 others

Who believes Trump, who was in his 50s at the time, actually went shopping for his GF at a department store? Somehow end up in a PUBLIC dressing room w/Carroll, but nobody saw him/her together? She's crazy.

10:21 PM · Nov 1, 2022

https://twitter.com/NanetteDonnelly/status/1587630954222436353



Trump responds to E. Jean Carroll defamation lawsuit after judge denies delA hoax and a lie' foxnews.com/politics/trump... #FoxNews Mfucker from E. Jean Carroll from 1990 till now you didn't feel your penis was ripped off by the president, whore who taught you to take your dignity?



foxnews.com

Trump responds to E. Jean Carroll defamation lawsuit after judge denies delay: ... Former President Donald Trump emailed a statement to his supporters Wednesday denying any wrongdoing in the ongoing defamation case brought b...

8:53 AM · Oct 13, 2022

https://twitter.com/bahman2990/status/1580542210809815040

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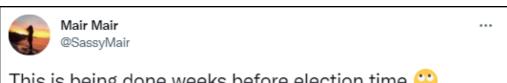


Replying to @SkyNews

lol..yeah, trust the gin and 20 cats lady to tell the 'truth'!

1:20 AM · Oct 20, 2022

https://twitter.com/dreamy121/status/1582965032362864640



This is being done weeks before election time Trump doesn't have to commit rape to get a woman, we have seen the women he goes for- have you seen her? Ugly Trump scheduled to appear Wednesday for deposition in E. Jean Carroll lawsuit - CNN Politics



apple.news

Trump appears for deposition in E. Jean Carroll lawsuit

Former President Donald Trump appeared Wednesday for a deposition as part of the defamation lawsuit brought by former magazine columnist E. Jean Carroll.

11:07 AM · Oct 19, 2022

https://twitter.com/SassyMair/status/1582750376628887552



https://twitter.com/firesti16018619/status/1580342702998450176



What a joke. Does anyone believe that ugly ass chick?



Ken Shepherd @KenShepherd · Oct 12, 2022

Trump to be deposed in E. Jean Carroll defamation lawsuit after federal judge rejected request for delay foxnews.com/politics/trump... #FoxNews

2:44 PM · Oct 12, 2022

https://twitter.com/CableNewsWatch/status/1580268104239976448

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APPENDIX F. <u>IMPACT MODEL</u>²⁴⁶

Category	No.	Percent Republican ²⁴⁷	Receptive Republicans ²⁴⁸	Percent Receptive Republicans ²⁴⁹	Impression Estimate (Low) ²⁵⁰	Impression Estimate (High) ²⁵¹	Receptive Impressions Estimate (Low) ²⁵²	Receptive Impressions Estimate (High) ²⁵³
Web	W-1	16.30%	76.00%	12.39%	1,129,400	1,129,400	139,910	139,910
Web	W-2	18.10%	76.00%	13.76%	879,010	879,010	120,917	120,917
Web	W-3	69.80%	76.00%	53.05%	927,666	927,666	492,108	492,108
Web	W-4	14.80%	76.00%	11.25%	367,495	367,495	41,336	41,336
Web	W-5	34.70%	76.00%	26.37%	187,652	187,652	49,487	49,487
Web	W-6			21.42%	499,813	499,813	107,066	107,066
Web	W-7	23.10%	76.00%	17.56%	261,664	261,664	45,938	45,938
Web	W-8			21.42%	72,622	72,622	15,556	15,556
Web	W-9			21.42%	42,304	42,304	9,062	9,062
Web	W-10			21.42%	168,103	168,103	36,010	36,010
Web	W-11			21.42%	104,780	104,780	22,445	22,445
Web	W-12			21.42%	26,145	26,145	5,601	5,601
Web	W-13			21.42%	69,711	69,711	14,933	14,933

Please see Appendix F produced in Excel format along with this Report for a more detailed Impact Model.

²⁴⁷ Percent of a publications' audience that are Republican, based on data from Pew Research. Cell is empty when data for the relevant publication is not available.

Republicans receptive to the claims (.76, YouGov). Cell is empty when Percent Republican data is not available for the relevant publication.

Calculated using the following formula: Percent Republicans * Receptive Republicans. When Percent Republican data is not available, I rely on the average Percent Receptive Republicans (21.42%).

The impressions estimate calculated in the Impressions Model. For social media posts, the high estimate is calculated using Equation 2a.

The impressions estimate calculated in the Impressions Model. For social media posts, the low estimate is calculated using Equation 2b.

Calculated using the following formula: Percent Republicans * Receptive Republicans * Impressions Estimate. If data related to Percent Republicans is not available, the equation is as follows: Average Percent Receptive Republicans (21.42%) * Impressions Estimate. The high receptive impressions estimate is based on the impressions estimate incorporating Equation 2a.

²⁵³ Calculated using the following formula: Percent Republicans * Receptive Republicans * Impressions Estimate. If data related to Percent Republicans is not available, the equation is as follows: Average Percent Receptive Republicans (21.42%) * Impressions Estimate. The low Receptive Impressions Estimate is based on the impressions estimate incorporating Equation 2b.

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Category	No.	Percent Republican ²⁴⁷	Receptive Republicans ²⁴⁸	Percent Receptive Republicans ²⁴⁹	Impression Estimate (Low) ²⁵⁰	Impression Estimate (High) ²⁵¹	Receptive Impressions Estimate (Low) ²⁵²	Receptive Impressions Estimate (High) ²⁵³	
Web	W-14			21.42%	180,967	180,967	38,765	38,765	
Web	W-15			21.42%	60,239	60,239	12,904	12,904	
Web	W-16			21.42%	49,634	49,634	10,632	10,632	
Web	W-17			21.42%	73,389	73,389	15,721	15,721	
Social	S-1	69.80%	76.00%	53.05%	778,223	3,929,736	412,832	2,084,646	
Social	S-2	23.10%	76.00%	17.56%	161,197	627,740	28,300	110,206	
Social	S-3			21.42%	98,992	154,446	21,205	33,084	
Social	S-4			21.42%	185,813	113,202	39,803	24,249	
Social	S-5			21.42%	451	451	97	97	
Social	S-6			21.42%	240	240	51	51	
Social	S-7			21.42%	958	958	205	205	
Social	S-8			21.42%	41	41	9	9	
Social	S-9			21.42%	546	546	117	117	
Social	S-10			21.42%	78	78	17	17	
Social	S-11			21.42%	9	9	2	2	
Social	S-12			21.42%	490	490	105	105	
Social	S-13			21.42%	248	248	53	53	
Print	P-1	18.10%	76.00%	13.76%	159,040	159,040	21,878	21,878	
TV	T-1	20.50%	76.00%	15.58%	1,305,000	1,305,000	203,319	203,319	
TV	T-2	20.50%	76.00%	15.58%	664,000	664,000	103,451	103,451	
TV	T-3	20.50%	76.00%	15.58%	1,284,000	1,284,000	200,047	200,047	
TV	T-4	20.50%	76.00%	15.58%	1,353,000	1,353,000	210,797	210,797	
TV	T-5	69.80%	76.00%	53.05%	2,423,000	2,423,000	1,285,353	1,285,353	
Truth Social				21.42%	271,200	904,000	58,094	193,647	
	TOTAL RECEPTIVE IMPRESSIONS (LOW/HIGH) 3,764,125 5,649,724								

APPENDIX G. <u>DAMAGES MODEL</u>²⁵⁴

High Impression Estimate, 1x Attitude Change Multiplier

Impression Target: ²⁵⁵ 5,649,724 Attitude Change Multiplier: 1x

Impression Rate: 5% Bounce Rate: 90%

Ad Category	Media Type	Weight ²⁵⁶	Target Impressions ²⁵⁷	Adjusted Impressions ²⁵⁸	CPM (per 1,000 impressions)	Total Cost ²⁵⁹
Native	Twitter Promoted Tweets	6.50%	367,232	367,232	$$6.46^{260}$	\$2,372.32
Native	Facebook Native Ads - Promoted Posts	6.50%	367,232	367,232	\$14.40 ²⁶¹	\$5,288.14
	Web Blog Influencer	5.00%	282,486	2,824,862	$$60.00^{262}$	\$169,491.73
Influencer	Twitter Influencer	7.00%	395,481	7,909,614	$$2.00^{263}$	\$15,819.23
influencer	Facebook Influencer	7.00%	395,481	7,909,614	$$25.00^{264}$	\$197,740.35
	YouTube Influencer	4.60%	259,887	5,197,746	$$20.00^{265}$	\$103,954.93
	Broadcast TV (Excluding Primetime)	29.60%	1,672,318	1,672,318	$$16.00^{266}$	\$26,757.09
	Cable TV (Excluding Primetime)	21.30%	1,203,391	1,203,391	\$10.00 ²⁶⁷	\$12,033.91
Traditional	Podcasts	5.00%	282,486	282,486	\$19.00 ²⁶⁸	\$5,367.24
	Radio	4.10%	231,639	231,639	$$4.00^{269}$	\$926.55
	Print newspapers	3.40%	192,091	192,091	\$67.00 ²⁷⁰	\$12,870.07
	Total	100.00%	5,649,724			\$552,621.56

High Impression Estimate, 3x Attitude Change Multiplier

Impression Target: 5,649,724 Attitude Change Multiplier: 3x

Impression Rate: 5% Bounce Rate: 90%

Ad Category	Media Type	Weight	Target Impressions	Adjusted Impressions	CPM (per 1,000 impressions)	Total Cost
Native	Twitter Promoted Tweets	6.50%	1,101,696	1,101,696	\$ 6.46	\$7,116.96
	Facebook Native Ads - Promoted Posts	6.50%	1,101,696	1,101,696	\$ 14.40	\$15,864.43
	Web Blog Influencer	5.00%	847,459	8,474,586	\$ 60.00	\$508,475.18
Influencer	Twitter Influencer	7.00%	1,186,442	23,728,842	\$ 2.00	\$47,457.68
	Facebook Influencer	7.00%	1,186,442	23,728,842	\$ 25.00	\$593,221.05
	YouTube Influencer	4.60%	779,662	15,593,239	\$ 20.00	\$311,864.78
	Broadcast TV (Excluding Primetime)	29.60%	5,016,955	5,016,955	\$ 16.00	\$80,271.28
Traditional	Cable TV (Excluding Primetime)	21.30%	3,610,174	3,610,174	\$ 10.00	\$36,101.74
Traditional	Podcasts	5.00%	847,459	847,459	\$ 19.00	\$16,101.71
	Radio	4.10%	694,916	694,916	\$ 4.00	\$2,779.66
	Print newspapers	3.40%	576,272	576,272	\$ 67.00	\$38,610.22
	Total	100.00%	16,949,173			\$1,657,864.69

²⁵⁴ Please see Appendix G produced in Excel format along with this Report for a more detailed Damages Model.

The impressions estimate from the Impressions Model.

The percentage of impressions allocated to different media types. Allocations based on Trump supporters most common way of getting political and election news.

²⁵⁷ The number of impressions allocated to the media type. Calculated using the following formula: Impression Target * Weight.

The number of impressions allocated to the media type, taking into account the impression rate for Twitter, Facebook, and YouTube influencers and the bounce rate for web blog influencers. For all other media types the Adjusted Impressions are the same as the Target Impressions.

²⁵⁹ Calculated using the following formula: (Adjusted Impressions / 1000) * CPM.

https://blog.hootsuite.com/twitter-statistics/.

https://www.wordstream.com/blog/ws/2021/07/12/facebook-ads-cost.

https://www.webfx.com/social-media/pricing/influencer-marketing/.

https://www.webfx.com/social-media/pricing/influencer-marketing/.

https://www.webfx.com/social-media/pricing/influencer-marketing/.

https://www.webfx.com/social-media/pricing/influencer-marketing/.

 $^{^{266} \}quad https://oaaa.org/Portals/0/2022_01\%20Solomon\%27s\%20US\%20Major\%20Media\%20CPM\%20ComparisonvOAAA.pdf.$

 $^{^{267} \}quad https://oaaa.org/Portals/0/2022_01\%20Solomon\%27s\%20US\%20Major\%20Media\%20CPM\%20ComparisonvOAAA.pdf.$

https://oaaa.org/Portals/0/2022 01%20Solomon%27s%20US%20Major%20Media%20CPM%20ComparisonvOAAA.pdf.

²⁶⁹ https://oaaa.org/Portals/0/2022_01%20Solomon%27s%20US%20Major%20Media%20CPM%20ComparisonvOAAA.pdf.

²⁷⁰ https://www.gaebler.com/Washington+Examiner-DC-Newspaper-Advertising-Costs++12549.

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High Impression Estimate, 5x Attitude Change Multiplier

Impression Target: 5,649,724 Attitude Change Multiplier: 5x

Impression Rate: 5% Bounce Rate: 90%

Ad Category	Media Type	Weight	Target Impressions	Adjusted Impressions	CPM (per 1,000 impressions)	Total Cost
Native	Twitter Promoted Tweets	6.50%	1,836,160	1,836,160	\$ 6.46	\$11,861.60
	Facebook Native Ads - Promoted Posts	6.50%	1,836,160	1,836,160	\$ 14.40	\$26,440.71
	Web Blog Influencer	5.00%	1,412,431	14,124,311	\$ 60.00	\$847,458.64
Influencer	Twitter Influencer	7.00%	1,977,403	39,548,070	\$ 2.00	\$79,096.14
	Facebook Influencer	7.00%	1,977,403	39,548,070	\$ 25.00	\$988,701.75
	YouTube Influencer	4.60%	1,299,437	25,988,732	\$ 20.00	\$519,774.63
	Broadcast TV (Excluding Primetime)	29.60%	8,361,592	8,361,592	\$ 16.00	\$133,785.47
T 1141 1	Cable TV (Excluding Primetime)	21.30%	6,016,956	6,016,956	\$ 10.00	\$60,169.56
Traditional	Podcasts	5.00%	1,412,431	1,412,431	\$ 19.00	\$26,836.19
	Radio	4.10%	1,158,193	1,158,193	\$ 4.00	\$4,632.77
	Print newspapers	3.40%	960,453	960,453	\$ 67.00	\$64,350.36
	Total	100.00%	28,248,621			\$2,763,107.82

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Low Impression Estimate, 1x Attitude Change Multiplier

Impression Target: 3,764,125 Attitude Change Multiplier: 1x

Impression Rate: 5% Bounce Rate: 90%

Ad Category	Media Type	Weight	Target Impressions	Adjusted Impressions	CPM (per 1,000 impressions)	Total Cost
Native	Twitter Promoted Tweets	6.50%	244,668	244,668	\$ 6.46	\$1,580.56
	Facebook Native Ads - Promoted Posts	6.50%	244,668	244,668	\$ 14.40	\$3,523.22
	Web Blog Influencer	5.00%	188,206	1,882,063	\$ 60.00	\$112,923.76
Influencer	Twitter Influencer	7.00%	263,489	5,269,775	\$ 2.00	\$10,539.55
	Facebook Influencer	7.00%	263,489	5,269,775	\$ 25.00	\$131,744.39
	YouTube Influencer	4.60%	173,150	3,462,995	\$ 20.00	\$69,259.91
	Broadcast TV (Excluding Primetime)	29.60%	1,114,181	1,114,181	\$ 16.00	\$17,826.90
To 1141 1	Cable TV (Excluding Primetime)	21.30%	801,759	801,759	\$ 10.00	\$8,017.59
Traditional	Podcasts	5.00%	188,206	188,206	\$ 19.00	\$3,575.92
	Radio	4.10%	154,329	154,329	\$ 4.00	\$617.32
	Print newspapers	3.40%	127,980	127,980	\$ 67.00	\$8,574.68
	Total	100.00%	3,764,125			\$368,183.78

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Low Impression Estimate, 3x Attitude Change Multiplier

Impression Target: 3,764,125 Attitude Change Multiplier: 3x

Impression Rate: 5% Bounce Rate: 90%

Ad Category	Media Type	Weight	Target Impressions	Adjusted Impressions	CPM (per 1,000 impressions)	Total Cost
Native	Twitter Promoted Tweets	6.50%	734,004	734,004	\$ 6.46	\$4,741.67
	Facebook Native Ads - Promoted Posts	6.50%	734,004	734,004	\$ 14.40	\$10,569.66
	Web Blog Influencer	5.00%	564,619	5,646,188	\$ 60.00	\$338,771.28
Influencer	Twitter Influencer	7.00%	790,466	15,809,326	\$ 2.00	\$31,618.65
	Facebook Influencer	7.00%	790,466	15,809,326	\$ 25.00	\$395,233.16
	YouTube Influencer	4.60%	519,449	10,388,986	\$ 20.00	\$207,779.72
	Broadcast TV (Excluding Primetime)	29.60%	3,342,543	3,342,543	\$ 16.00	\$53,480.69
Traditional	Cable TV (Excluding Primetime)	21.30%	2,405,276	2,405,276	\$ 10.00	\$24,052.76
Traditional	Podcasts	5.00%	564,619	564,619	\$ 19.00	\$10,727.76
	Radio	4.10%	462,987	462,987	\$ 4.00	\$1,851.95
	Print newspapers	3.40%	383,941	383,941	\$ 67.00	\$25,724.03
	Total	100.00%	11,292,376			\$1,104,551.33

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Low Impression Estimate, 5x Attitude Change Multiplier

Impression Target: 3,764,125 Attitude Change Multiplier: 5x

Impression Rate: 5% Bounce Rate: 90%

Ad Category	Media Type	Weight	Target Impressions	Adjusted Impressions	CPM (per 1,000 impressions)	Total Cost
Native	Twitter Promoted Tweets	6.50%	1,223,341	1,223,341	\$ 6.46	\$7,902.78
	Facebook Native Ads - Promoted Posts	6.50%	1,223,341	1,223,341	\$ 14.40	\$17,616.11
	Web Blog Influencer	5.00%	941,031	9,410,313	\$ 60.00	\$564,618.79
Influencer	Twitter Influencer	7.00%	1,317,444	26,348,877	\$ 2.00	\$52,697.75
	Facebook Influencer	7.00%	1,317,444	26,348,877	\$ 25.00	\$658,721.93
	YouTube Influencer	4.60%	865,749	17,314,976	\$ 20.00	\$346,299.53
	Broadcast TV (Excluding Primetime)	29.60%	5,570,905	5,570,905	\$ 16.00	\$89,134.49
Traditional	Cable TV (Excluding Primetime)	21.30%	4,008,793	4,008,793	\$ 10.00	\$40,087.93
Traditional	Podcasts	5.00%	941,031	941,031	\$ 19.00	\$17,879.60
	Radio	4.10%	771,646	771,646	\$ 4.00	\$3,086.58
	Print newspapers	3.40%	639,901	639,901	\$ 67.00	\$42,873.39
	Total	100.00%	18,820,626			\$1,840,918.88

Summary of Calculated Damages:

Attitude Change Multiplier	1x	3x	5x
Low Receptive Impression Estimate	\$368,183.78	\$1,104,551.33	\$1,840,918.88
High Receptive Impression Estimate	\$552,621.56	\$1,657,864.69	\$2,763,107.82

APPENDIX H. LIST OF CONSERVATIVE STEPS TAKEN

IMPRESSIONS MODEL				
Online News Articles Considered	 Online news impressions are limited to the articles cited in the Complaint. I did not count other online news articles that covered or discussed the Statement. Further, some of the articles from the Complaint were authored by the Associated Press. It is likely that identical (or very similar) versions of these articles appeared in multiple publications. For instance, the October 12, 2022, AP article, titled "Trump Angrily Lashes Out After His Deposition Is Ordered," appeared in at least 137 additional news outlets while I only included the one published on the Seattle Times. 			
Social Media Posts Considered	 I limited social media impressions to those that quote the Statement directly or contain an image of the Statement. While I did consider the retweets and quote tweets of the 13 original tweets, I did not consider in-text quotations or paraphrases of the statement. Additionally, I did not consider any tweets from other publishers of stories covering Mr. Trump's Statement, tweets from users who shared links to the 17 articles (or other articles containing the Statement), or tweets in which users repeated or otherwise amplified the Statement. Additionally, due to the opacity of other platforms, I did not account for impressions generated on any other social media platform, despite there being evidence the articles considered in the impressions analysis were spread widely online. 			

²⁷¹ Larry Neumeister & Jill Colvin, Trump Angrily Lashes Out After His Deposition Is Ordered, THE SEATTLE TIMES (Oct. 12, 2022), https://apnews.com/article/new-york-lawsuits-manhattan-donald-trump-lewis-a-kaplan-ce7b11f1f0e3ea1bec35e8f1f1b929d9.

See for example Larry Neumeister & Jill Colvin, Trump Angrily Lashes Out After His Deposition Is Ordered, YAHOO! NEWS (Oct. 12, 2022); Larry Neumeister & Jill Colvin, Trump Angrily Lashes Out After His Deposition Is Ordered, THE DENVER POST (Oct. 12, 2022); Larry Neumeister & Jill Colvin, Trump Angrily Lashes Out After His Deposition Is Ordered, DAILY HERALD (SUBURBAN CHICAGO) (Oct. 12, 2022).

TV Broadcasts Considered Other Sources of Impressions Not Considered	 I only considered TV broadcasts contained in the Internet Archive's TV News Archive database from the following broadcasters: ABC, Fox, NBC, MSNBC, CBS, and CNN. Among the broadcasts I found on the TV News Archive, I only included broadcasts that included direct quotes from the Statement. I did not include impressions generated from people who were exposed to the Statement in article headlines while browsing Google News, Apple News, or other news aggregating applications. I did not consider second-level impressions (retruths) of Mr. Trump's initial statement. I did not consider the impact of word-of-mouth
Online News Impressions Calculation	 on the transmission of the Statement. I incorporated a website's bounce rate when calculating online news impressions to exclude users who navigated to a website without performing any actions. Nonetheless, it's possible that users could have navigated directly to the relevant article on the website and been exposed the Statement without taking any additional actions.
QUANTI	ΓATIVE IMPACT MODEL
Negative Associations are Harmful	• Any impression generated that linked Ms. Carroll's person brand with the content of the Statement is harmful. Person brands need to be protected and any information that connects a person brand to a "hoax" and a "scam" and other negative information is harmful, even if the person's fans or followers do not believe the claims. Nonetheless, I limited my estimate of the quantitative impact to potential readers and viewers who identify as Trump supporters and/or are Republicans who may find Trump's Statement credible.
Limited Set of Impressions as an Input	The impact model relies on the impressions estimate and therefore does not account for the impact associated with impressions generated from additional online and print articles, TV broadcasts, and social media posts covering the Statement.

DAMAGES MODEL				
Impressions and Impact as Inputs	 The damages model also relies on the impressions model and therefore does not account for impressions generated by additional online and print articles, TV broadcasts, and social media posts that covered the Statement. The damages model also relies on the impact model and therefore is limited to the costs needed to repair the impressions generated by people who are likely to be receptive to the Statement. 			
Production Costs	 The damages model does not incorporate the production and operating costs associated with running the campaign. 			
Attitude Change Multiplier	• When calculating damages, I included attitude change multipliers (1x, 3x, and 5x) to account for the fact that it takes multiple impressions to change an attitude. In most cases, a multiplier of at least 3 (the medium estimate) would constitute the minimum corrective campaign to run. However, if Ms. Carroll were to run a prior corrective campaign, some harm would have been mitigated. As a result, I use the lowest frequency multiplier to avoid overly exposing the target audience to the corrective message.			